DOCUMENT RESUME

ED 418 030 SO 028 699

AUTHOR Lee, Stephen R.

TITLE The Effects of Vocalization on Achievement Levels of

Selected Performance Areas Found in Elementary Instrumental

Bands.

PUB DATE 1996-00-00

NOTE 90p.; M.A. Thesis, Salem-Teikyo University.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS *Achievement; Applied Music; *Bands (Music); Grade 5;

*Instrumentation and Orchestration; Intermediate Grades;

*Music; Music Activities; Music Education; *Music

Techniques; *Vocal Music

IDENTIFIERS West Virginia

ABSTRACT

This study is of a comparison of two instructional methods used in elementary band settings. This study examined the effect of tonal patterned instruction with vocalization techniques. The musical concepts under examination include articulation and phrasing. In addition, an effort was made to determine the extent to which vocalization practices are used in West Virginia, and the methods which may or may not be employed. The study compared the performance levels of fifth-grade students after they had engaged in vocalized tonal patterned instruction to performance levels after traditional note-to-note instruction. The musical concepts under examination include articulation and phrasing. Results from the study support the use of vocalization in an instrumental setting. Analysis of data show significant correlation of vocalization practices employed in this study to achievement levels in articulation and phrasing. Results suggest the use of vocalization with tonal patterned instruction over traditional methods. (Contains 43 references and 12 appendixes.) (EH)



THE EFFECTS OF VOCALIZATION ON ACHIEVEMENT LEVELS OF SELECTED PERFORMANCE AREAS FOUND IN ELEMENTARY INSTRUMENTAL BANDS

A THESIS

PRESENTED TO

THE FACULTY OF THE GRADUATE SCHOOL

SALEM-TEIKYO UNIVERSITY

IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
MASTER OF ARTS DEGREE

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

STEPHEN R.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

By Stephen R. Lee November, 1996



Salem-Teikyo University Salem, West Virginia

This thesis submitted by Stephen Ray Lee has been approved meeting the research requirements for the Master of Arts Degree.

197 John Thesis Committee
Chair

Daté

John F. Curran, Ph. D., Education Department Chairperson and Professor of Education, Salem-Teikyo University, Salem, West Virginia

Graduate Study

Committee Member

Sharon Brisbin, Ph. D, Part-time Instructor of Education,

Salem-Teikyo University, Salem, West Virginia and

Teacher, Harrison County Schools, Clarksburg, West Virginia

11

Graduate Study __Committee Member

Ďate (

Education, Salem-Teikyo University, Salem, West Virginia



ABSTRACT

THE EFFECTS OF VOCALIZATION ON ACHIEVEMENT LEVELS OF SELECTED PERFORMANCE AREAS FOUND IN ELEMENTARY INSTRUMENTAL BANDS

Stephen R. Lee

This study is a comparison of two instructional methods used in elementary band settings. Data generated from this study compare instrumental performance levels of fifth grade students after tonal patterned instruction with vocalization techniques, to performance levels after traditional note to note instruction. The musical concepts under examination include articulation and phrasing. In addition, an effort was made to determine the extent to which vocalization practices are used in West Virginia, and the methods which may or may not be employed.

Results from this study support the use of vocalization in an instrumental setting. Analysis of data show significant correlation of vocalization practices employed in this study to achievement levels in articulation and phrasing. Results suggest the use of vocalization with tonal patterned instruction over traditional methods.



ACKNOWLEDGEMENTS

The author would like to express appreciation to Dr. John Curran, Dr. Gaby van der Giessen, and Dr. Sharon Brisbin for their guidance and dedication to the Graduate Program at Salem-Teikyo University. Sincere gratitude goes to my wife Marcia Lee for her patience and support.



V

TABLE OF CONTENTS

PRELIMINARIES	
Title Page	<u>_</u> i
Approval Page	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	v
CHAPTER	
I. THE PROBLEM AND ITS SETTING	1
The Introduction	1
The Statement of the Problem	3
The Subproblem	4
The Hypothesis	4
The Definition of Terms	4
The Assumptions	6
The Limitations	6
The Purpose	7
II. THE REVIEW OF RELATED LITERATURE	10
Introduction	10
History	10
Development and Issues	
Related Research	19
Summary	24
III. METHODS AND PROCEDURES	
Setting	26



Population	27
Design	27
Instructional Procedures	28
Collection of Data	
IV. ANALYSIS OF COLLECTED DATA	
Presentation of Data, Tables, and Diagrams	40
Explanation and Analysis of Data	
V. SUMMARY AND CONCLUSIONS	
Summary	54
Conclusions	55
Recommendations	
BIBLIOGRAPHY	57
APPENDIXES	vii
Appendix 1 Permission to Conduct Research	
Appendix 2 Instructional Procedures (exp)	
Appendix 3 Evaluation Test for SST	
Appendix 4 Evaluation Sheet for SST	
Appendix 5 Evaluation Sheet for PTR	
Appendix 6 MAP Answer Sheet	
Appendix 7 Letter to Parents	<u>xv</u>
Appendix 8 Student Survey	xvi
Appendix 9 Instructional Procedures	xvii
Appendix 10 Vocalization Survey	XVIII
Appendix 11 Information Letter	xxi
Appendix 12 Results of SQR	xxii



I. THE PROBLEM AND ITS SETTING

Introduction

Elliott has revealed"regular vocalizing during the instructional class may result in the players' increased ability to relate music notation to sound rather than to specific fingerings or slide positions" (19:121). Research cited by Schleuter, has recognized student participation in singing exercise as a viable method of instruction, and its use is "probably the most important activity for developing a sense of tonality and instrument readiness." He further implied that singing enhances various musical elements and should accompany all instrumental education (13:30). Additional research found in this study supported the theory that singing activities form a solid foundation for instrumental development, although Burton (17:31) and Robinson (28:18) contend that the technique is rarely used at any level in the rehearsal process.

Research indicated that vocalization is perceived as an effective method of instruction, and as previously stated by Burton and Robinson, educators are reluctant to employ singing activities in an instrumental setting (17:88). From these results, educators may question why the level of application does not coincide with the level of perception. According to Casey, the current trend is that instrumental educators are gradually realizing the importance of vocalization, and application of the vocal technique is becoming a realization in the classroom (3:193). Positive results from formal study of vocalization has directed the focus of research to examine the method, techniques, application, and the effects of singing on achievement levels, as they apply to skill concepts of music. Aural perception (22:172), pitch discrimination (19:127), reading ability (32:34), and intonation (37:1), are found as selected topics (13:30).



Phrasing, articulation, and tonal patterns were selected concepts for this investigation. Their importance in the performing arts are considered imperative by music educators. The first concept of phrasing, as explained by Leonard and House, contains the "heart of the appreciation of music" (9:293). A similar response recorded by Mursell and Glenn, referred to the phrase as "the heart of musical expression" (11:258). The relative importance of the phrase substantiates the selection of the phrasing concept in this study.

The term articulation denotes clarity in performance. Articulation was chosen for this study for its close relationship to phrasing. Clarity in performance is achieved through a combination of the two (1:668). The relative importance of articulation as expressed by Casey is that it "conveys the melodic line to the audience, gives the line clarity, defines musical style, gives contrast and nuance, and it maintains musical continuity" (3:367).

For the purpose of this study, articulation may be referred to as correct tonguing and slurring of the musical phrase. The neutral syllables used in this study were selected because they correspond to physical movements of the tongue necessary for separating and connecting pitches. All slurs found in this study were sung on the syllable "ee", while all tonguing was sung on the syllable "tee". The physical position of the tongue while singing, thus corresponds to the physical location necessary while performing. This selection of syllables was supported by research of Dunlap, Gordon, Burton, and Bennett. The use of neutral syllables according to Dunlap enhances a sense of tonality, improves intonation, and encourages proper phrasing (32:7).



Tonal patterns, the third concept employed in this study, was found as the recommended method of instruction in nearly all formal studies examined. According to research, presentation of two to five pitches rather than individual tones, enhanced student's sight reading and auditory-visual discrimination skills (12:23), pitch discrimination (19:122), tonality, melodic and rhythmic skills (22:172). MacKnight reported that when performing, "better readers grasped the whole pattern at a glance while poor readers read note to note" (25:24). In this study, tonal patterns were taught in a sequence of single units consisting of two or more tones arranged in phrases, with aural presentation.

In summary, research suggests increased achievement levels were found in student performances when instructional methods included tonal patterns, phrasing or vocalization. This supporting research prompted the selection of tonal patterns, complete phrasing, and vocalization to be used in combination as an instructional method found in this study. In an attempt to analyze the effectiveness of this method of instruction, comparisons were made to traditional note to note instruction. A secondary objective of this study was to examine what vocalization practices are currently used in West Virginia.

The Statement of The Problem

What is the effect of vocalized tonal patterned instruction when employed in an elementary band setting and, to what extent is vocalization used as an instructional method in West Virginia.

The Subproblems

The first subproblem of this study was to compare the levels of achievement in the areas of articulation and phrasing where (1) students were



4

engaged in vocalized tonal patterned instruction and, (2) students were subjected to traditional note to note instruction void of vocalization practices.

<u>The second subproblem</u> was to determine what instructional methods and procedures of vocalization are presently used in West Virginia.

The Hypotheses

The first hypothesis was that students will perform selected material with fewer errors in articulation and phrasing as a direct result of participation in vocalized patterned instruction.

<u>The second hypothesis</u> was that the use of vocalization, as a mode of instruction, in elementary instrumental classes in West Virginia will show minimal actualization.

Definition of Terms

<u>Articulation</u> - A term used to denote, clarity and distinct rendition in musical performance.

<u>Audiation</u> - Ones ability to derive musical meaning through mentally hearing music by means of recall, musical composition or viewing notation.

<u>Aural Perception</u> - The ability to perceive aurally the relationship of tones within harmonic framework.

<u>Aural-Visual Discrimination</u> - The ability to recognize notation of music that is heard.

Chinning - Singing without text or syllables.

Composition - A musical work.

<u>Comprehensive</u> - Presentation of material through aural/kinesthetic/visual means.

<u>Ear - to - Hand</u> - Ability to perform music that is heard.



<u>Elements of Music</u> - Pitch, rhythm, form, texture, melody, harmony, and tone color.

Harmony - The chordal structure of a composition.

<u>Heterogeneous</u> - Differing in kinds, i.e., woodwinds, brass, strings, percussion.

Homogeneous - Similar in kind, i.e., woodwinds only, brass only.

Interval - Distance between two tones.

Melodic Line - A melody and its shape.

Melody - A succession of tones in a desired sequence.

Meter - Beats in which music is measured.

<u>Modeling</u> - Presentation of material through aural/kinesthetic means, no visual intervention.

Musicologist - A theorist of music.

Notation - Method for writing music indicating pitch and duration.

<u>Phrase</u> - A division of the musical line, somewhat comparable to a clause or a sentence in prose.

Pitch - The location of a musical sound in the tonal scale.

Resolution - A means to obtain harmonic flow.

Rhythm - The movement of music in time.

<u>Solemnization/Solfege</u> - General term for systems of designating degrees of the scale by syllables instead of letters, solmization and solfege will be used interchangeably in this study.

Style - Methods of treating all musical elements, types of composition.

Tempo - Speed of a composition.

<u>Tonality</u> - Loyalty to a tonic, giving reference to a tonal center.



Tonal Patterns - Musical phrase of two to five tones reflecting tonality.

<u>Tonic</u> - The first note in a key.

<u>Tonguing</u> - Separating tones with the tongue.

<u>Traditional Method</u> - Atomic note identification approach in which pitches are isolated and notationally presented one at a time.

<u>Vocalization</u> - Melody sung on a vowel without text.

The Assumptions

<u>The first assumption</u> is that the fifth grade students of North and Jennings Randolph Elementary constitute an adequate sample size.

<u>The second assumption</u> is that the fifth grade students of North and Jennings Randolph Elementary are typical of most beginning band students.

<u>The third assumption</u> is that the time frame outlined in this study was adequate to conduct the research prescribed.

<u>The fourth assumption</u> is that the evaluative instruments and procedures were accurate and valid.

The Limitations of The Study

- 1. The study examined only the achievement levels in two specific areas of musical performance.
- 2. The sample size was limited to forty-eight subjects who were fifth grade students.
 - 3. The time frame of this study was limited to six weeks.
- 4. Both groups received the same material, but each group was limited to one distinct mode of instruction.



- 5. Extraneous variables may have been a factor in the validity of results: subjects previous musical training, private lessons such as, piano, guitar, other instruments or voice, or extracurricular choir. An attempt was made to eliminate all possible foreseen circumstance before the study began, by distributing a student questionnaire which is included in appendix #8, page xiv.
- 6. A survey was sent to one hundred randomly selected beginning band instructors prior to the start of school. No attempt was made to survey instructors of higher education.

The Purpose

The purpose of this study was to determine the importance of including singing, and more specifically singing with tonal patterns, as a mode of instruction for instrumental training. Research supports the accepted philosophy of most music educators that singing is "critical to the development of musical understanding and aesthetic sensitivity" (28:17). As indicated by Robinson (32:133) and Burton (17:88), an overwhelming majority of music educators continue to administer instrumental instruction without singing activities, either as modeling or with student participation in vocal practices. The mode of instruction most commonly used, referred to as traditional instruction, delivers pitch names and note values as single units. This type of instruction is partially influenced by method books currently in print. (3:7).

Schleuter explained that traditional instruction focuses on techniques, melodic and rhythmic reading skills, and an association of fingerings with names of notes. He conveyed that typically the type of instruction received by the educator was a note-to-note relationship (13:26). The problem with this type of instruction, according to Griss, is that "a beginner who learns through



additives, unmusical perception of notation, retains this style long after he is beyond the beginning stages of reading" (21:21). Griss argued that a note to note sequence of learning, affected students audiation abilities to perceive the melodic line, and his interpretation of the style in which the piece of music was written (21:21). Schleuter supported this proclamation by indicating that when students perceive a musical line as a succession of individual notes, rather than to a logical sequence of tones, limited performance abilities result. Schleuter concluded by stating, "there are scores of instrumental performers who can't play without their music and in fact, can't play with their music" (13:26).

Gordon agreed with Schleuter and Griss, that increased performance abilities were related to the perception of the melodic line, and maintained that audiation skills are necessary. Gordon continued that audiation requires a perception of syntax, which is an orderly arrangement of sound (7:65). Syntax, according to Gordon is perceived by patterns of sound that are dictated by tonality (7:65). Research by Dunlap, suggested that audiation increases with the use of tonal patterns and vocalization (32:43). In theory, also supported by MacKnight, instruction with tonal patterns and vocalization would result in increased levels of achievement of both sight reading skills and auditory visual discrimination skills (25:23).

In summary, vocalization with tonal patterns was hypothesized to increase musical concepts, aural and pitch discrimination, reading ability, intonation, and tonality (3:194). Specific concepts under investigation in this study however, will include articulation and phrasing, both of which will be taught with vocalized tonal patterns. Effects of this method of instruction, and a



realization of a method that is considered imperative, but still practiced as an ancillary mode of instruction defines the purpose of this thesis.



II. REVIEW OF RELATED LITERATURE

Introduction

The literature exemplified in this study addressed the effects of vocalization, and the extent to which it is applied in the instrumental classroom. The limitations of the study allowed investigation of singing with either syllables, solemnization, and/or the use of tonal patterns. The musical concepts relative to this investigation were, tonal pattern (16:74), reading abilities (25:34), aural perception (22:172), interval training (36:1), pitch discrimination (19:127), intonation (37:1), and application (17:33–34). Examination of secondary studies conducted by Noble, Dickey, Fortney, Whitener, and Kendall incorporated concepts relative to the present investigation, but no duplicate study was found. Structured singing activities in an instrumental setting was found to be supported by seemingly limited formal investigation.

The studies conducted by Burton and Robinson concerning the extent to which singing is applied in the instrumental classroom, revealed that instructors advocated the importance of vocalization, but generally used the technique infrequently (17:32). Given the relative importance of singing, Grutzmizer (22:172) and Burton (17:31) implied that current practices do not reflect apparent success formulated by research. "The paradox that exists between educational philosophy and pedagogical practice in instrumental music demonstrates a need for further research" (22:172).

History

According to Colwell, the first formal research in music education was documented in 1837 by the Connecticut General Assembly. Literature revealed that surveys were used to collect data in reference to singing or



instrumental abilities (4:49). A relationship of singing and instrumental study, as reported by Burton and Robinson was not included. However, the application of singing as a practiced method of instruction for instrumental study, was typically found in conservatories and private studios. At this point in time, vocalization primarily remained as a practiced belief of the positive effects it had on musical concepts, rather than a method substantated by research (17:30).

The continued development of music research as presented by Schleuter, parallels the history of curriculum in general education at the turn of the century. Schleuter indicated that research in this specific area was limited prior to 1900, until Pestaloyzian principals produced a casual effect on the philosophy of both instrumental and vocal instructional methods (13:16). Colwell supported Schleutor's findings by indicating that requests from experts were made in the 1920's, for needed research to confirm theories and methodology for teaching instrumental music (4:50). Burton concluded that by mid-century, various methods resulting from formal inquiry, proclaimed that singing with solfege or neutral syllables enhanced intonation and musical style. He further implied that as notoriety gained momentum in literary fields, research in the 1960's and 1970's focused on effective methods and techniques for the development of instrumental skill concepts (17:30).

In 1969 research in music education focused on quality, form, and content through training programs conducted by the Music Educators National Conference (MENC). Content that developed from five additional programs challenged traditional techniques of instrumental teaching and caused research to expand in the area of student learning processes (32:209). The realization



that research supported by MENC was not being reached by the majority of educators, prompted the United States Department of Education to initiate a periodic publication of What Works. The first document was publicized in 1986 entitled What Works: Research About Teaching and Learning. In an attempt to enhance communication between the researcher and the classroom an additional document was published in 1989 by MENC, entitled What Works: Instructional Strategies for Music Education. From this correspondence an interactive work shop on What Works was held in 1990 at the University of Indiana. According to Karjala, through these efforts an innovative step in research and development of musical education has been made (29:45). The instructional strategy incorporated in this research included vocalization with tonal patterned instruction in an attempt to continue the search for the development of effective methods of application.

Development and Issues

According to Karjala, research since 1969 has focused on the application of teaching strategies for the entire curriculum in public and private sectors of music education. Studies covering perception, cognition, learning theories and processes in music have paralleled those found in mathematics, science, and social studies (29:45). Research pertaining to the present, included those studies which examine performance skills and concepts of instrumental students under experimental teaching conditions. Strategies examined within these confines included concept, comprehensive, and modeling approaches to learning.



Influenced in 1969 by the MENC conference Noble conducted an experimental study to examine the effects of teaching through a concept approach, on performance skills of instrumental students. Noble's approach to learning was to teach established goals and musical concepts to beginning band students prior to physical instrumental performance. The concepts included an orientation to the physical design of each instrument, correct procedures for tone production, the ideal tone quality to achieve, intervals of notation, rhythmic values of notes, common rhythms, and phrases. After a twelve week investigation, Noble concluded that the concept approach to teaching instrumental music was superior to the traditional approach. In the traditional method the previous concepts mentioned were introduced to students as needed during the twelve week study. Noble recorded that higher performance skills were achieved under the concept approach for the upper woodwinds, high brass, and for percussion students. In addition, he found that students with a greater musical aptitude received higher scores in performance skills when exposed to the concept approach (32:112).

In an investigation resembling the design of the present study, a comprehensive approach to learning was conducted by Whitener. Instruction through the comprehensive method was contingent on teaching the elements of music while learning performance skills. Beginning instrumentalists from the seventh and eighth grade comprised the sample. Subjects assigned to the experimental group was instructed through the comprehensive approach, while students who were taught from traditional methods made up the control group. Results generated from standardized musical tests revealed the experimental



group received higher achievement levels in performance skills than did the control group. Whitener concluded that beginning instrumental programs might include instruction in other elements of music in conjunction with the mechanics of performance skills (38:1).

The comprehensive approach to music learning was challenged by Kendall through a comparative study to a modeling approach. Modeling in this study, required aural/kinesthetic instruction with no visual intervention. After sixteen weeks of experimental instruction, text measurements were compared in achievement levels of ear-to-hand, solfege, performance, and sight reading skills. Results showed no significant differences between either mode of instruction for ear-to-hand and performance skills. Noticeable improvements however, were detected in the group who received the comprehensive approach with solfege and visual intervention during instruction. Kendall concluded that visual intervention of notation increases verbal association and melodic/rhythmic sight reading skills (35:1).

An additional study concerning the effectiveness of modeling was conducted by Fortney. Unlike Kendall's investigation that was administered to fifth grade beginning instrumentalists, Fortney employed subjects in the sixth grade after having received one year of previous instruction. Four rehearsal conditions were defined for evaluation in this study; modeling, silent analysis, free practice, and traditional instruction. Results showed modeling produced greater increase in student achievement levels than in all other scenarios. In addition, when modeling was combined with silent analysis, significant results were attained over the other instructional strategies (20:19).



Research on teacher demonstration of musical concepts pertinent to the development of instrumental performance skills was continued with an investigation of the effects of singing exercises in an instrumental setting. Davis conducted research with fifth and sixth grade band students in attempt to measure the effects of modeled singing activities on achievement levels of performance skills, melodic tonal imagery, self-evaluation, and attitude. The experimental conditions were 1) structured singing, 2) self-evaluation and, 3) the combination of both structured singing and self-evaluation. Results of this study indicated that fifth grade subjects involved in singing activities during instrumental study received higher levels of achievement on performance skills than those who were not subject to vocal participation or demonstration. Additional results indicated significance was attained in student attitude but, not for melodic tonal imagery. Sixth grade participants scored higher under the combination experimental condition in the areas of performance skills and attitude than did the fifth grade students. Both sample scenarios were recorded as having the greatest increase in all evaluations under the structured singing and self-evaluation experimental conditions. Davis concluded that all three conditions provided a positive approach for developing instrumental skills, self-evaluation techniques, and a more positive attitude for students (31:1).

In a review of research on modeling, Dickey reported significant results in favor of modeling with both vocal and instrumental demonstration during instruction. According to Dickey, teacher demonstration of performance concepts were "identified as the greatest single contributor to variance in instrumental effectiveness (18:30). Teacher demonstration over verbal instruction was reported as having greater effects in ear-to-hand, and



kinesthetic response skills. In support of the present research, Dickey reported that relatively few instructors consistently use their acquired instrumental or vocal skills during instruction. Results of 22.65 percent of overall imitation in either instrumental demonstration, kinesthetic or oral imitation was reported as being used during rehearsals. Dickey maintained that the "teacher demonstration – student imitation cycle constitutes substantiating a musical experience for what is otherwise usually verbal description" (18:38). His overall findings in favor of the modeling approach was that the method developed greater musical skills and more positive student/teacher relationships. Results show greater discrimination skills as to appropriate choices of musical performance and modeling was found to be more effective at all age levels that verbal instruction (18:30).

Similar in methodology and design to the previously mentioned studies, the present research required the use of modeling techniques. Teacher demonstration and student response of musical concepts employed in this investigation were presented through tonal patterned instruction. Patterned instruction referred to the sequential presentation of short segments of rhythmic and/or melodic phrases typically found in tonal progressions. In support for the use of tonal patterns Bennett proclaimed that "researchers in the area of speech and brain functions have endorsed the notion that, even when items are not grouped, people naturally process information by organizing it into patterns for retention and recall" (16:74). Bennett conducted an investigation on the length of patterns to determine student's perception of melodic and rhythmic content.



The sample for this investigation included eighteen students ranging from kindergarten through fourth grade. Activities conducted during general music classes included singing exercises, listening lessons, and theory practice. Students were evaluated according to proficiency of chinning abilities, tapping of melodic rhythm, and dotting (notating a rhythmic pattern on paper). Her results indicated that a significant difference was found in relation to pattern length. Patterns arranged in a four beat duration as compared to other pattern lengths, were perceived more frequently (16:74). In addition, Bennett found that chinning techniques were most effective. Chinning, according to Bennett, "allows a student to be vocal without needing to be verbal" (16:83). Bennett allowed that solmization vocalization required labeling, discriminating, decoding, or describing; chinning required only vocal imitation. Bennett's results advocate the use of tonal patterns without solmization. For this reason chinning or neutral syllables will be used in this thesis (16:83).

The effects of vocalization techniques with the use of neutral syllables on tonal memory, reading ability, pitch, and aural discrimination skills were examined by researchers Elliott and Schlacks. Elliott employed a pretest-posttest design where one hundred eighty-eight beginning wind instrumental students served as the sample for this investigation. Participants in the control group received traditional note to note instruction throughout the study. Students in the experimental group however, were instructed to follow traditional procedures, that also included vocalized selections from the same method book.

Results from Elliot's study indicated that achievement levels in pitch discrimination and tonal memory skills for the experimental group were greater than that of the control group. Higher levels of achievement attained in this study



were recorded in the concept area of aural-visual discrimination. Elliott concluded that regular activity in vocalization practices would significantly increase a student's ability to match aural sounds with music notation. Elliott further proclaimed that a conversion of musical notation into musical sound was significantly realized in the experimental group results (19:128).

Schlacks also conducted a related investigation in an attempt to measure the effects of vocalization on pitch accuracy while using an interval training program. In contrast to previous elementary studies reviewed, this research was performed at the high school level. The experimental/control group design was employed and measurements were assessed on the student's ability in singing intervals, instrumental performance of intervals, and a culmination of both singing and performing. Schlacks concluded that there was significant difference between playing and singing rather than just singing or just playing (36:1).

An additional study relating to Schlack was conducted in a higher educational setting. Smith examined the effects of vocalization on the intonation of college wind performers. The sample consisted of ninety-four students who attended Florida State University. Subjects were evaluated on their achievements of intonation after vocal instruction in comparison to achievement of intonation through instrumental instruction only. Vocal instruction consisted of two instructional scenarios, play and sing/play. In the play category students performed musical selections on instruments alone. The sing/play condition required subjects to vocalize on any syllable, the required selection prior to instrumental performance. Smith indicated that no significant differences were found in the performance of either group. The students



performing on brass instruments however, received higher scores in intonational deviation than those students who performed on woodwind instruments under the same sing/play conditions. Vocalization techniques in this study may suggest a sing/play technique over traditional methods (37:1).

Related Research

Research related to the present study was conducted by Grutzmizer, MacKnight, and Dunlap. Similarities are noted through examination of the effects of vocalization using a tonal patterned approach as compared to the traditional method of note to note instruction. Concepts under scrutiny differed slightly. Grutzmacher investigated the effects of vocalization on sight reading, aural perception, and reading recognition of major and minor tonalities. Her sample consisted of forty-eight beginning band students from three different settings. Students were selected randomly for the experimental or control group design. Each group received the same instruction, but the control group was reported as having content presented without tonal patterns or vocal intervention. Grutzmacher concluded that the group receiving vocalization with tonal patterned instruction achieved higher scores than the group that was excluded from any vocalization technique. Significant differences were found in the concept areas of aural identification and melodic sight reading ability. Grutzmacher's research suggested that tonal patterned instruction with vocalization techniques may be superior to the traditional note to note instruction for the development of specific skill concepts (22:177-178).

In a similar study conducted by MacKnight, contributions were made to the research of vocalization techniques through an investigation of reading abilities after melodic instruction. Tonal patterns also were used to introduce



pitch to the experimental group. The control group was introduced to pitch through traditional letter-fingering-sound approach. Ninety fourth grade students from three elementary schools served as subjects for each individual group. The experimental group was introduced to pitches in patterns similar in sequence to the present study. Both melodic and rhythmic presentation was delivered in complete phrases through auditory-visual patterns requiring vocal response from students of solfege syllables or letter names. The control group was recorded as receiving melodic and rhythmic instruction requested by standard method book procedure, note-fingering-sound.

Results showed that tonal patterned instruction may be superior to traditional techniques in the development of both sight reading skills and auditory-visual discrimination skills. In addition, MacKnight stated that her findings suggest that tonal patterned instruction had a significant effect on students with low musical abilities (25:23).

Similar findings were reported by Dunlap in his investigation of the effects of solmization training on musical achievement of beginning instrumental students. Dunlap conducted a fourteen- week study where ninety-two beginning band students were assigned to either the experimental group or a control group. The experimental group sang rhythmic patterns using rhythmic syllables, melodic patterns with solmization, and instrumental songs with lyrics. The control group performed the same patterns on their instruments. Dunlap concluded that vocal accuracy was significantly related to achievement in aural-visual discrimination, ear-to-hand coordination, and instrumental performance skills. This examination indicated that solmization treatment showed no significant effect on the skills mentioned above. Dunlap's



investigation indicated that the effectiveness of tonal patterned instruction may no necessarily depend on solmization syllables (32:133).

The perceived effectiveness of singing as a mode of instruction was found in a study conducted by Burton to be extremely high, at at the same time vocal techniques were found to be infrequently used (17:88). Using a different methodology than Dunlap, Burton made contributions to the research of vocalization through an attempt to determine the extent to which vocalization was used as an instructional technique. He sent surveys to 275 randomly selected high schools, and schools of higher education in Alabama, Georgia, Louisiana, and Mississippi. These surveys ascertained the methods that were employed during class instruction in relation to frequency of effectiveness, and opinions of effectiveness. Results of his study indicated that on a scale of 1 never used, and 5 - used daily, high school band instructors recorded a mean of 2.2, and college level instructors recorded a mean of 2.07 in their use of vocal instructional techniques. Burton concluded that instrumental instructors do not frequently use vocalization. Sing-play-sing technique was reported as the most effective method. Also, effectiveness ratings were higher than frequency ratings. Lack of time, current success rate acceptable with conventional techniques, and an uncertainty of how to implement the method, were recorded as influential factors determining frequency of use of vocalization as a means of instruction (17:88). Burton recommended further study in all areas relating to vocalization and instrumentation. He also recommended more study concerning the differences in perceived effectiveness of vocalization and the frequency of use. In addition, he made references for further study in effective techniques, and methods of implementation of vocalization (17:35).



In a review of vocalization practices currently used in public education, Robinson supported the findings of Burton, and advocated the use of singing activities in the instrumental classroom. Recommendations for implementation of the vocalization approach to instruction were found as well as why the method is not currently used. Robinson agreed with Burton and suggested three additional factors contributing to infrequent use of singing as a mode of instruction. First, there is a fear of wasting rehearsal time on nonperformance objectives. Research by Dunlop contradicted the educators fear by concluding time spent on vocal activities do not impede student achievement levels (32:133). Robinson further implied that vocal activities develop independent learners capable of solving their own musical problems in areas such as tonality, intonation, and pitch recognition.

The second factor perceived by Robinson, was indicated as being a lack of confidence in the educator's own singing voice. Robinson implied that modeling by the instructor provides an environment conducive to learning, and when mistakes are made, they too can contribute to the learning process. Robinson suggested that the instructor demonstrate phrases for rehearsal warm-up by using his/her maj or instrument. Instrumental modeling according to Robinson, can provide an initial step in the process of teaching student vocal participation (28:18).

The third contributing factor was stated as being a fear of negative student response. Students, like their educators, need to be introduced to vocal participation gradually in a relaxed environment. Robinson suggests the use of humming at initial stages to produce a less threatening atmosphere. After



student confidence levels are gained, the director should advance to open-mouthed singing. Other suggestions include starting with familiar songs of moderate vocal ranges, introduction of new songs without notation, singing simple phrases on neutral syllables, echo singing in short patterns, sing with students during echo, sing before playing on instruments, and finally, transpose music to place the melodic line in a comfortable vocal range. Suggested vocal techniques also included chanting, rapping, whistling, and possibly using siren sounds (28:17-19).

Additional recommendations to introduce singing in an instrumental setting were recorded by the following researchers reviewed during the present study:

Burton (17:89)

- a. Start the process playing one note at a time and sing the same note.
- b. Alternate between playing and singing tuning notes, scales, phrases, and chorales.
- c. Familiar musical selections are advantageous for development of student confidence levels.

Casey (3:331)

- a. Humming could be used during initial stages of vocalization rehearsal.
- b. Each rehearsal should begin with vocalization exercises.
- c. Start vocalization activities on day one of instruction and continue with the method daily.
- d. Start with easy musical selections.



- e. Students should echo sing the director.
- f. Students should finger on his/her instrument while singing.

Merrion (11:78)

a. Students should sing and finger notes simultaneously to improve reading skills.

Elliott (19:121)

a. The sing/play method should be used for vocalization rehearsals.

Bennett (16:84)

- a. Students should sing in short patterns.
- b. Rehearsals in vocalization should be conducted on neutral syllables.

Schoop (29:46)

- a. Neutral syllables or hissing should be used when studying rhythmic patterns.
 - b. Band directors should occasionally sing while students play.

Summary

Instructional techniques found in this review include a variety of strategic approaches to teaching instrumental music; content, comprehensive, modeling and vocalization approaches to instruction are documented. The common factor linking each together may be identified as the presentation of material through a vocal melodic or instrumental means. Vocal and instrumental demonstration were reported as effective. Vocalization however, was hypothesized as having a significant effect on achievement of specific concepts



in instrumental training. The use of either neutral syllables or solfege has been successfully used (13:1), (16:23). The use of singing in combination with tonal patterned instruction indicated the most positive levels of achievement (26:134).



III. METHODS AND PROCEDURES

Setting

This research study was conducted in Elkins, West Virginia located in Randolph County. This rural county contains 1,046 square miles within its borders and is located in the North Central Region of West Virginia. Major access is available to Elkins from US Route 219 and 205 from the south and north respectively, and Route 33 from east and west.

County services available to residents of the county include West Virginia Human Services and Employment Security, Appalachian Mental Health Center, and a Youth Center. Davis Memorial Hospital serves the county's major medical needs. In addition, private medical clinics are located in Harman, Pickens, and Tygarts Valley.

Randolph County has been experiencing a decline in school enrollment. A loss exceeding sixteen percent of the total student population has been recorded in the past ten years according to the 1990 revision of the Randolph County Comprehensive Educational Facilities Plan. The two schools represented in this study are North Elementary and Jennings Randolph Elementary. North is located near Route 219 North of Elkins, approximately one mile outside the city limits. The indicated enrollment is just over 6 percent of the total population, totaling three hundred eight students. Jennings Randolph is located within the city limits of Elkins on the south side of town. The recorded enrollment for this school is just over seven percent of the total population, totaling three hundred forty-two students (42:4).



Population and Design

Beginning fifth grade band students from North and Jennings Randolph Elementary Schools served as samples in this six week experimental study. Subjects participating in the band program included twenty students from North Elementary and thirty students from Jennings Randolph Elementary. Two students from Jennings Randolph indicated through a student questionnaire that they had prior training in piano. In an attempt to eliminate any variables that may interfere with the validity of the results, those students were excluded from the study results. The total population for the study included forty-eight students.

Eighty-eight percent of the students participating in the study acquired a musical instrument at "join the band night" on September 4, 1996. Join the band night was conducted with the assistance of two colleagues, and the local music store in Elkins for the purpose of supplying instruments to prospective band students. Instruments were rented or purchased at that time after students were play-tested for maturation and adaptability (appendix 11, page xxi). The remaining students, who could not afford an instrument on September 4, 1996 were issued a school owned instrument the following day. One hundred percent of the students completed the study. Attrition was not a factor in the research.

This research was designed to serve dual objectives. The parameters included the effects of vocalization on specific achievement levels in the instrumental classroom, and its current application in West Virginia. Data used to evaluate the extent to which vocalization techniques are currently used was gathered from questionnaires devised by the instructor. The procedure used to determine the effects of vocalization was a pretest/posttest control group design



using the <u>Musical Aptitude Profile</u> by Edwin Gordon (8: 9). Additional posttest measures were conducted at the end of the study. The measures included a teacher devised performance test, and a selected test from the <u>Sounds</u>

<u>Spectacular</u> method book by Andrew Balent. These tests were administered as a posttest only, as mastery of skills were required for completion of each. All data was presented through comparisons of graphs, charts, and percentages with calculation of mean, median, and mode. Analysis of covariants and the t-test also were used as a means for presenting data.

Instructional Procedures

North School participants were assigned to the experimental group, which received tonal patterned instruction with vocalization techniques. Jennings Randolph students received traditional note to note instruction void of any singing exercises. Instruction began on September 9, 1996 and concluded on October 18, 1996.

Subjects in both band programs rehearsed in homogeneous sectionals twice weekly for thirty minutes in each session. Each class, brass and woodwind, therefore was separated from the other because of pedagogical reasons. However, full band instruction was conducted once each week for thirty minutes. All instruction was initiated by the same teacher.

Written instruction containing home rehearsal procedures were given to both groups in the study. Included in the experimental group memo were,

1) sequence of warm up procedures, 2) recommended frequency of practice per week, 3) singing instructions for melodic phrases and rhythm patterns as discussed in class, and 4) instruction for preparation of homework assignments



(appendix 2, page viii). The control group memo included the same directions excluding number three as stated above (appendix 9, page xvii). After completion of the third week of the study, flyers were sent home to parents as a reminder to monitor their child's rehearsal habits. Criteria administered to the control group during regularly scheduled rehearsals at school were based primarily on recommended lesson plans provided by the Sounds Spectacular method book. Time schedules suggested in the plans however, were not followed. This series provides a detailed lesson plan booklet with a sequence of instructional content for the school year. Recommended solos, concert selections, and studies are provided for each hierarchical step of learning. The melodic and rhythmic content prescribed in the series was taught by note to note technique where each tone was considered as an individual pitch. Tonal patterns and vocalization techniques were not employed as a means of demonstrating pitches. The instructional procedures for the experimental group differed from the control group in the area of presentation of content. The experimental group followed the same guidelines as the control group, and each progressed through lesson three of the Sounds Spectacular at the same rate. The experimental group however, was taught through the use of tonal patterns, where two or more notes were introduced simultaneously and presented in complete phrases with vocal demonstration. All students were expected to echo sing the director, then play selected musical examples. Instructional techniques used during school rehearsals were as follows:

- 1) all material was presented in complete phrase form
- 2) all examples were sung on neutral syllables
- 3) sing/play technique was used consistently



4) tonal patterns were either tongued and/or slurred when played on the student's instrument.

These instructional techniques previously mentioned were employed with selections from Sounds Spectacular (2:5) as well as tonal patterns provided by the teacher. Active involvement in the instrumental performance of the tonal patterns encompassed approximately 30 percent of each rehearsal. The remaining rehearsal time was used for instruction in Sounds Spectacular.

The selection of tonal patterns used in the experimental group was designed on the basis of research conducted by Dunlap, Gordon, and Grutzmacher. The sequence of tonal patterns adopted for this study are listed in Table 1. The number beside each pattern indicates what week of the study the pattern was introduced.

TABLE 1

Week () Tonal Patterns and Sequence of Presentation

- (1) Do Re Do
- (2) Do Re Mi, Mi Re Do
- (3) Do Re Mi Fa
- (4) Do Re Mi Fa So, So Fa Mi
- (5) So fa Mi Re Do
- (6) Do Mi So, So Mi Do, Do Re Mi Fa So Fa Mi Re Do Mi So, Mi Do

Note: Syllables are illustrated in solfege with B flat concert pitch as the tonic.



The pitches represented in Table 1 were the same pitches presented in Sounds Spectacular through the course of the study with exception to the pitch La, which was included only in Sounds Spectacular and not in the tonal patterned instruction. The sequence of presentation differed for both groups. Sounds Spectacular introduced the pitches according to Table 2.

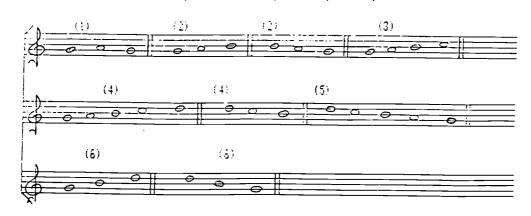
Table 2 Week () Sequence of pitches introduced by Sounds Spectacular (1) Mi Fa (2) So (3) So (6) Do Re

Table 3, page 32 represents the sequential approach of patterned instruction taught to the experimental group in addition to the prescribed rehearsal lessons in Sounds Spectacular (2:5). Examples of pitches, phrase patterns and rhythmic articulations are illustrated in weekly increments. Students in the experimental group, using the sing/play method, were instructed to perform these patterns as a warm up exercise at home as well as in class before preceding to the assigned lesson in Sounds Spectacular. The control group received the same rhythmic and melodic content, but as prescribed in the Sounds Spectacular lesson plan booklet (2:6). Table 4, page 33 represents the sequential approach of instruction experienced by the control group.



TABLE 3 SEQUENTIAL APPROACH TO PATTERNED INSTRUCTION FOR EXPERIMENTAL GROUP

WEEK Co. Tomal Pasterns, articulations, obvious, and phythms



Week () Practice Exercises Used During Study





38

Table 4
Sequential Approach to Note to Note Instruction for Control Group

WEEK 1	LESSON	NUMBERS 1-4	PITCHES Mi, Fa	RHYTHMS Whole Note Whole Rest Quarter Note	PHRASING n/a
2	1	5-8	Mi, Fa	Quarter Rest Whole Note Whole Rest Quarter Note	Two Measure Eight Count
3	1	8	Mi, Fa	Quarter Note Quarter Rest Whole Note	Two Measure Eighth Count
	2	1-5	Mi, Fa, So	Quarter Note Whole Note Whole Rest Quarter Rest	Two Measure Eight Count
4	2	1-8	Mi, Fa, So	Half Note Half Rest Quarter Note Quarter Rest Whole Note Whole Rest	Two Measure Eight Count
5	2	9	Mi, Fa, So	Quarter note Quarter Rest Half Note Whole Note	Two Measure Eight Count
	3	1-3	Mi, Fa, So, La	Dotted Half Quarter Note Whole Note Half Note	Four Measure Twelve Count Two Measure Eight Count
6	3	1-6	Mi, Fa, So, La	Quarter Note Half Note Whole Note Dotted Half	Two Measure Eight Count Four Measure Twelve Beat

NOTE: SELECTED EXAMPLES IN TABLE 4 WERE SLURRED AS WELL AS TONGUED.



The technique of slurring from one pitch to another as indicated in table 3 and 4, was introduced to both groups at the onset of the study, although the Sounds Spectacular series does not explore this concept until lesson eleven has been mastered. All students were instructed in the use of this technique after the second pitch was introduced. The only difference in instruction was that the experimental group was engaged in singing of slurs while the control group performed the technique on their instrument only. Slurs were sung on the syllable "ee", while all tonguing exercises were sung on the syllable "tee" during each rehearsal.

Average expenditures of rehearsal time for both groups are illustrated in tables 5 and 6, page 35 and 36 respectively. Approximations were derived from recordings of three rehearsals spaced two weeks apart during the course of the study. Recordings illustrated in table 5 indicate students were actively engaged in vocal activities ranging from just over three to six minutes daily. Results further indicate that 16.27 percent, or a mean of 4.88 minutes, of each experimental group rehearsal was used for singing instruction, and 74.43 percent, or a mean of 22.43 minutes, were primarily used for instrumental instruction. Instrumental instruction totals were derived from a combination of minutes students were engaged in performance of Sound Spectacular selections and tonal patterns respectively. Expenditures of rehearsal time for the control group are illustrated in table 6. Recordings of school rehearsals were conducted the same as for the experimental group. Results indicate that approximately 91 percent or twenty- seven minutes of each thirty minute rehearsal was used for instrumental instruction of selections from Sounds Spectacular. Further



indications reveal that no rehearsal time was used for vocalization or tonal patterned instruction for the control group.

Comparisons of tables 5 and 6 indicate that the control group experienced approximately 16 percent more instrumental performance time than the experimental group. The difference in time was utilized by the experimental group in vocal activities. When comparing results of the Sounds Spectacular instruction categories, the control group received an average of 46 percent more instruction in that particular area. The difference in time was utilized by the experimental group for vocal and tonal patterned instruction. Further comparisons reveal that the experimental group received vocalization and tonal patterned instruction for 45.7 percent of each rehearsal. Tables 5 and 6 indicate rehearsal dates of the recordings and the time that was utilized for preparation, vocalization, and instrumental instruction.

TABLE 5

AVERAGE EXPENDATURE OF TIME DURING SCHOOL REHEARSALS

EXPERIMENTAL GROUP	DATE OF RECORDING	========= MINUTES OF VINSTRUCTION	MINUTES OF SS INSTRUCTION	MINUTES OF TP INSTRUCTION	======= MINUTES OF PREPARATION
First Recording	Sept. 18	5.45	12.0	10.0	2.15
Second Recording	Oct. 2	6.00	13.0	8.0	3.00
Third Recording	Oct. 16	3.20	16.0	8.5	2.30
Mean		4.883	13.6	8.83	2.48
Percent		16.27	45.0	29.43	8.27

KEY. V - VOCAUZATION SS - SOUND SPECTACULAR TP-TONAL PATTERN

<u>V Instruction</u> - teacher instruction in vocalization and student invalvement in singing activities i.e., tonal patterns or selections from SS.

<u>55 Instruction</u> – teacher instruction in instrumental performance and student involvement in performing on their instrument of selections from <u>Sounds</u> <u>Spectacular</u> only.

<u>TP Instruction</u> - teacher instruction in tonal patterns and student involvement in singing or performing TP of their instrument.



BEST COPY AVAILABLE

TABLE 6

AVERAGE EXPENDATURE OF TIME DURING SCHOOL REHEARSALS

CONTROL GROUP	DATE OF RECORDING	MINUTES OF VINSTRUCTION	MINUTES OF SS INSTRUCTION	MINUTES OF TP INSTRUCTION	MINUTES OF PREPARATION
First Recording	Sept. 18	0	27.65	0	2.35
Second Recording	Oct. 2	0	26.95	0	3.05
Third Recording	Oct. 16	0	27.35	0	2.55
Mean		0	27.35	0	2.65
Percent		0	91.00	0	8.83

KEY: V - VOCALIZATION SS - SOUND SPECTACULAR TP-TONAL PATTERN

Collection of Data

The data used to evaluate the effects of two instructional techniques employed in this study were generated through musical examples selected from the Sounds Spectacular method book (SST, appendix 3, page x), a performance achievement test developed by the researcher (PTR, appendix 5, page xiii), and the Musical Aptitude Profile (MAP, appendix 6, page xiv). The SST and the PTR tests were performance oriented, which required mastery of necessary performance skills, achieved only through rehearsal preparation. Therefore, these tests were administered as a posttest only. A self-devised survey also was used to collect data in an attempt to determine the use of vocalization in West Virginia (SQR). In addition, forms and letters required for operational purposes of the study were included (appendix 1, 2, 7, and 8, pages vii, viii, xv, xvi). The Sounds Spectacular (2:5) method book by Andrew Balent was designed for beginning instrumentalists, and may be used for either heterogeneous or homogeneous instruction. Tests for evaluation are found throughout the series. The selections chosen for evaluation of student achievement in this study may be found on lesson two, number nine, and on



BEST COPY AVAILABLE

lesson three number one. Selections were chosen for their required skills in phrasing. Each example consisted of four phrases of eight counts each (appendix 3, page x).

Student performances of selections from SST were recorded and then evaluated by a colleague of the researcher. To avoid bias in adjudication, recordings were kept anonymous as to which group they belonged. Evaluation of each recording was based on a number system ranging from one through five, where one equaled zero mistakes made, and five equaled four or more performance mistakes made. The adjudicator was instructed to focus on phrasing and articulation only (appendix 4, page xi).

The PTR performance test was designed to measure student's achievement of both groups in phrasing and articulation. The test consisted of five musical examples. Each example consisted of familiar tones and rhythms previously covered during class instruction. The tests took approximately sixty seconds to administer to each student. Adjudication of the PTR was conducted by a colleague. The same measures previously mentioned were taken to avoid bias in adjudication (appendix 5, page xiii).

The third battery used as a measure for evaluation of student achievement was the <u>Musical Aptitude Profile</u> (MAP) by Edwin Gordon. The MAP was the only standardized test used in this study reporting a composite reliability of .91 (appendix 6, page xiv). The MAP consists of three parts, each designed to measure various musical abilities. Part one and two contain two subtests each for measuring tonal imagery and rhythm imagery respectively. Part three contains three subtests, each designed to measure musical sensitivity. Therein lies the subtest of phrasing which was used for evaluation in this study.



The subtest of phrasing is a listening test containing thirty response questions. Each question included two musical selections presented by taped recordings of the cello and violin. The format required each student to make a selection from the two musical examples performed for each question. Possible responses included a number one, number two, and an unsure column. Selection of the correct response was to be determined by making a value judgment as to which example sounded better. Students were instructed to mark the unsure column if they were not certain as to the correct response. Each phrase or example varied in degrees of musical sensitivity.

The PTR, SST, and MAP served as evaluative measures for the first subproblem in this study. The second subproblem, however required different measures for testing. In order to examine the collateral problem of the use of vocalization in beginning classrooms of West Virginia, a survey questionnaire (SQR), was distributed to one hundred elementary band directors throughout the state. To aid in the return of each questionnaire, a self-addressed stamped envelope was included with the survey. Thirty-one percent of the educators responded to the survey and fourteen of those requested a summary of the results. Follow-up letters were not used to increase response, and no attempt was made to assertain information from instructors in an environment of higher education.

The vocalization questionnaire consisted of fifteen questions presented in three sections. Section one was designed to determine the extent and capacity of use, section two explored the instructor's perceived effectiveness, and section three examined methods of instruction. Possible responses to each question



were arranged into five sequential categories ranging from disagree strongly to agree strongly. A response in category one indicated strong disagreement or infrequent use of the concept explored in each question. A response in category five indicated strong agreement or frequent use of the concept. In addition, data concerning the instructors confidence level in methods of implementation were obtained (appendix 10, page xviii).

The final procedures used for collecting data in this study include necessary operational forms. A letter to each principal requesting permission to conduct the study (appendix 1, page vii), a rehearsal instruction sheet for both groups (appendix 2, page viii), and notification to parents explaining the study (appendix7, page xv) were used. A survey also was given to each student participant in an effort to define any noticeable differences between the experimental and control group (appendix8, page xvi).



IV. Analysis of Collected Data

Statement of Hypotheses

Will students perform selected material with fever errors in articulation and phrasing as a direct result of participation in vocalized patterned instruction, and will the use of vocalization as a mode of instruction show minimal actualization in elementary instrumental classrooms of West Virginia?

Presentation of Data, Tables, Graphs

During the final week of this study, posttests were administered to both experimental and control groups as an evaluative measure to compare the effects of the two instructional methods defined in this study. The dependent variables used to evaluate the first subproblem were the <u>Musical Aptitude Profile</u> (MAP), two different selections from the <u>Sounds Spectacular</u> method book (SST), and a self-devised achievement test (PRT). Analysis of the survey questionnaire (SQR) used in this study provide information pertaining to the second subproblem of the use of vocalization instruction in West Virginia.

Collected data for the MAP tests are illustrated in Tables 7 and 8 page 41. Data presented in Table 7 were calculated according to scores resulting from pretest/posttest differences for each group. The mode of evaluation was the t-test requiring a separate standard error of measures for each sample. Table 8, page 41 represents data obtained from an analysis of covariance through the use of the Pearson Product-Moment Coefficient Correlation. Pretest/posttest comparisons for each group are illustrated by mean and r values.



Table 7
MAP-T PRE/POST EVALUATION

Group	N	Mean	q [t	D_	a
-		2.35 .2857	2	1.9287	2.021	.05

Table 8

<u>Pearson r Correlation Coefficient of MAP Pre/Post Evaluation</u>

	Pretest	Posttest					
Group	Mean	Г	d <u>f</u>	р	<u>N</u>	a	
Exp.	18.15	20.5		2	.3974	20	.05
Con	19.82	20.10	.5272	2	.2981	28	.05

Evaluation of posttest measures for the SST and the PTR are illustrated in Tables 9 and 10 page 42. Data gathered from SST tests represent student performance achievement levels of two different musical selections in the area of articulation and phrasing. Group means for each selection and concept with t distributions are indicated. Table 10 represents achievement levels accrued by each group also in the area of articulation and phrasing. Each of the five subtests of the PTR are illustrated through mean and mean differences of both groups with t distributions for each. Table 11, page 43 shows collated mean scores for each group with composite mean totals.



Table 9
SST – t Test and Mean

Musical	Artic	ulation	Phras	sing	a=.05		
<u>Selection</u>	E		_ E	<u>C</u>	<u>df</u>	 	р
3 #1	4.55	4.46			2	.3075	2.021
			4.3	4.1	2	.5505	2.021
2 #9	4.25	3.92			2	.7739	2.021
			4.05	3.82	2	.5539	2.021

E = experimental group mean

c= control group mean

Table 10 PTR – t Test and Mean

Musical	Artic	ulation	Phra	sing	Mean	a=.05	Ne=20	NC=28
<u>Selection</u>	<u> </u>	C	Ę	C	Diff.	d€	t	D
Subtest 1	3.1	2.67			.43 E	2	.8581	2.021
			3.75	3.32	.43E	2	1.0055	2.021
Subtest 2	3.35	2.17			1.18 E	2	2.4686	2.0 21*
			3.7	3.21	.49E	2	1.3483	2.021
Subtest 3	4.1	4.42			.32C	2	8569	2.021
			3.65	2.85	.8 E	2	1.8018	2.021
Subtest 4	3.7	2.67			1.03E	2	3.3737	2.021*
			3.85	3.82	.03 E	2	.0815	2.021
Subtest 5	3.9	3.42			.48 E	2	1.6643	2.021
			4.15	3.39	.76 E	2	2.0507	2.021*

^{*} = significant at the .05

 ${\rm Diff.} = {\rm difference} \ {\rm between} \ {\rm E} \ {\rm mean} \ {\rm and} \ {\rm C} \ {\rm mean}$



E = experimental group mean

C= control group mean

TABLE 1 1

Combined Mean from SST and PTR Tests

Musical	Articula	ation	Phrasin	9
Selection	ŧ	<u>C</u>	E	С
3 #1	4.55	4.56	4.3	4.1
2_#9	4.25	3.92	4.05	3.82
Subtest 1	3.1	2.67	3.75	3.32
Subtest 2	3.35	2.17	3.7	3.21
Subtest 3	4.1	4.42	3.65	2.85
Subtest 4	3.7	2.67	3.85	3.82
Subtest 5	3.9	3.42	4.15	3.39
	26.95	23.73	27.45	24.51
	3.85	3.39	3.92	3.50
	Selection 3 #1 2 #9 Subtest 1 Subtest 2 Subtest 3 Subtest 4	Selection E 3 #1 4.55 2 #9 4.25 Subtest 1 3.1 Subtest 2 3.35 Subtest 3 4.1 Subtest 4 3.7 Subtest 5 3.9 26.95 3.85	Selection E C 3 #1 4.55 4.56 2 #9 4.25 3.92 Subtest 1 3.1 2.67 Subtest 2 3.35 2.17 Subtest 3 4.1 4.42 Subtest 4 3.7 2.67 Subtest 5 3.9 3.42 26.95 23.73 3.85 3.39	Selection E C E 3 #1 4.55 4.56 4.3 2 #9 4.25 3.92 4.05 Subtest 1 3.1 2.67 3.75 Subtest 2 3.35 2.17 3.7 Subtest 3 4.1 4.42 3.65 Subtest 4 3.7 2.67 3.85 Subtest 5 3.9 3.42 4.15 26.95 23.73 27.45 3.85 3.39 3.92

The following data pertain to the second subproblem, result from an analysis of the SQR surveys returned to the researcher. Responses recorded for each question of the survey are graphically illustrated in Appendix 12, page xxii. Response frequencies and percentages are indicated for each.

Explanation and Analysis of Data

A complete set of data was attained for all forty-eight subjects included in this study. The first test given to the students at the onset of the study was the MAP. Pretest and post results are shown in table 12, page 44.



Table 12
Pretest and Posttest Means for MAP

Group	Pretest	Posttest	Difference
Experimental	18.15	20.5	2.35
Control	19.82	20.1	.28

A comparison of the mean score of each group indicates that the control group scored higher on the MAP pretest than the experimental group. Further comparison shows that the mean for the experimental group increased 2.35 points at the conclusion of the study. Less than one point increase was recorded for the control group. Results imply that the musical sensitivity level for both groups increased after instrumental study. However, results compiled by the experimental group imply that the experimental treatment was more effective.

Posttest evaluations of the MAP found the correlation of the experimental treatment to be high, although not significant at the .05 level. Results from the t-test are presented in Table 7, page 41. Similar results were obtained through the Pearson Product Moment Correlation Coefficient. Recorded data for the Pearson r are presented in Table 8, page 41. No significant results were obtained for the experimental group. The control group however, received significant results for this test.

Evaluation of SST scores are presented in Table 9, page 42. The SST was administered as a posttest only. Comparisons for this test were based on



the level of achievement attained by each group in the areas of articulation and phrasing. Data presented for each musical selection show the mean for each group to be high in comparison to the mean attained for each group in the PTR test (Table 10, page 42). Possible conclusions accounting for this noticeable difference may result from the level of difficulty of each musical selection. The relationship between the SST scores were not significant at the .05 level for this test. The PRT performance test also was administered as a posttest only. Data found in Table 10, page 42 shows results of t test evaluations on five musical selections. Each selection was evaluated according to achievement scores in articulation and phrasing only. Mean scores are recorded for each group, subtest, and musical concept investigated. Differences of means between the groups are indicated in the mean difference column, showing which group received the highest average score for each particular test. Results show that the experimental group received the highest mean score on nine of the ten categories listed. Significant levels of difference also were found in three of the nine categories. The articulation score for subtest two and four, and the phrasing score for subtest five suggest a strong relationship to the treatment received by the experimental group.

A comparison of the combined mean scores for the SST and PTR is contained in Table 11, page 43. Mean scores for both groups, each musical concept, and subtest are listed. Composite totals reveal that the experimental group consistently scored higher on achievement levels in both articulation and phrasing, with the concept of phrasing receiving the highest score of the two. Inferences drawn from these data lead one to conclude that the treatment received by the experimental group was effective.



The SQR was arranged in three sections to obtain information in the following areas; 1) style and musical concepts, 2) methodology, 3) frequency of use and perceived effectiveness and, 4) confidence levels for implementation. Analysis of data generated from SQR are presented in Tables 13–17, pages 46–52. Response frequencies and percentage calculations for each category indicate the degree of preference for each question. The style of instruction most commonly used was found to be neutral syllables. Data gathered in Table 13 result from questions three, four, and five found the in survey.

TABLE 13
Preferred Style of Instruction

Neutral Syllables

<u>Category</u>	1	2	3	4	_5
Frequency	6	3	8	5	9
<u>Percent</u>	19	9	26	16	29

Written Prose

<u>Category</u>	_1	2	3	4	5	
Frequency	15	8	4	0	4	
<u>Percent</u>	48	26	13	0	13	



47

Solfeg	e Sy	llab	les
			_

<u>Category</u>	1	2	3	4	5_	
Frequency	15	8	7	1	0	
Percent	48	26	23	3	0	
=====	=====	:======	======			

Responses in Category three, four, and five were considered to be a positive to each question. Data show that approximately 72 percent of the educators surveyed prefer to use neutral syllables during vocalization exercises.

The musical concepts taught most frequently during singing activities are represented in Table 14. Responses were gathered from question number six on the survey. Again, responses in categories three, four, and five were considered as favorable indications toward each concept explored in question six. The sequential order of preference for instruction was found to be articulation, pitch recognition, sight reading, rhythm reading, phrase, style, melodic reading, and intonation.

TABLE 14

Question #6 - Students in my beginning band rehearsals sing to improve the following musical concept skills.



					48
		<u>Rhythm F</u>	Reading		
Category	1	2	3	4	5
Frequency	1	6	7	2	15
Percent	3	19	23	6	48
		<u>Melodic F</u>	Reading		
<u>Category</u>	1	2	3	4	5
Frequency	4	6	7	2	12
<u>Percent</u>	13	19	23	6	39
		Sight Re	ading		
Category	1	2	3	4	5
Frequency	3	4	10	4	10
Percent	9	13	32	13	32
		<u>Intonat</u>	rion		
Category]	2	3	4	5
Frequency	6	6	5	7	7
<u>Percent</u>	19	19	16	23	23
		<u>Pitch Reco</u>	<u>gnition</u>		
Category	_ 1	2	3	4	5
Frequency	1	5	9	6	10
Percent	3	16	30	19	32



					49
		<u>Styl</u>	<u>e</u>		
Category	1	2	3	4	5
Frequency	3	7	7	5	9
Percent	9	23	23	16	29
		Articulo	<u>ation</u>		
Category	1	2	3	4	5
Frequency	0	4	10	7	10
Percent	0	12	32	23	32
		<u>Phras</u>	ing		
<u>Category</u>	_1	2	3	4	5
Frequency	2	7	6	5	11
Percent	6	23	19	16	35

The instructional methods of choice were found to be play/sing/play, echo sing the director, and tonal patterned instruction over note to note instruction. Table 15, page 50 represents data collected from questions thirteen, fourteen, and one.



Table 15

Question #13 - I feel the most effective method of instruction is

<u>Method</u>	S/P	S/P/S	P/S	P/S/P	_ P	
Frequency	10	6	1	13	1	
<u>Percent</u>	32	19	3	42	3	

Key: S/P = sing/play

 $S/P/S = \frac{sing}{play}/\frac{sing}{sing}$

P/S=play sing

P/S/P=play/sing/play

P=play only

Question #14 - Musical examples are demonstrated to my students by

Phrases / Note to Note

Frequency 26 / 7

Percent 84 / 23

Question #1 - Students in my beginning band rehearsals echo sing my demonstrations.

Category	11	2	3	4	5
Frequency	3	7	7	5	9
Percent	9	23	23	16	29



According to the data represented in question one, 55 percent of the responses indicate students do not participate regularly in echo singing.

The perceived effectiveness of vocalization compared to the actual use of vocalization in the instrumental classroom was analyzed from responses to question one and question twelve. Eighty-seven percent of the educators surveyed indicated vocalization is an effective method of instruction. In contrast, data presented in Table 16, shows that 59 percent of the educators surveyed regularly involve their students in singing activities during rehearsal. Thus far percentages calculated for graphical representation of each question has included categories three, four, and five. The figure of 59 percent was derived from this method of calculation. Further investigation of this question concerning student involvement in singing exercises, show that 55 percent of the educators surveyed responded in category two and three. Categories two and three indicate a neutral or slightly negative response to the question.

Evidence may suggest that students of West Virginia are actually involved in vocalization practices less than originally thought.

TABLE 16

Question #2 - Students in my band rehearsals are actively involved in vocalization practices.

Category	1	2	3	4	5
Frequency	3	10	7	4	7
<u>Percent</u>	9	32	23	13	23



52

Question #12 - Rate your perceived effectiveness of vocalization.

C <u>ategory</u>	<u> </u>	2	3	4	5
frequency	1	3	8	11	8
Percent	3	9	26	35	26

Question nine and eleven of the survey pertain to confidence levels of implementation and procedures of vocalization instruction in the instrumental setting. Results are presented in Table 17.

TABLE 17

Question #11 - Implementation of vocalization practices in an instrumental setting is clearly understood.

Category		2	3	4	5
frequency	2	8	13	4	4
Percent	6	26	42	13	13

Question #9 - I clearly understand the most effective methods and procedures of vocalization.

Category	1	2	3	44	5
Frequency	1	3	9	12	6
Percent	3	9	30	39	19



Analysis of data presented in Table 17 indicated that educators clearly understood the most effective methods of vocalization, but are unsure how to implement the method in an instrumental setting.



V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The intent of this study was to investigate the effect of vocalization activities presented with tonal patterned instruction in an instrumental setting. The concept areas under investigation were articulation and phrasing. Results of data presented in this study indicated increased levels of achievement were obtained in each concept area. Comparison of experimental group test scores resulting from the vocalization instructional method, to the control group test scores attained during the traditional note to note instructional method, show that the experimental group achieved a higher composite mean score than the control group in both concept areas. Significant correlation of achievement levels between the vocalization instructional method and the note to note instructional method were recorded in three subtests. Evidence based on these results suggested acceptance of the first hypothesis. However, nonsignificant correlation also was found in various testing scenarios.

Results obtained from the SQR support the second hypothesis stated as, the use of vocalization as a mode of instruction, in elementary instrumental classes of West Virginia will show minimal actualization. An analysis of data resulting from the questionnaire survey shows that an overwhelming majority of 97 percent of the instrumental educators perceive vocalization as an extremely effective method of instruction. In contrast, less than half of the educators surveyed attest to the regular use of vocalization in the classroom. Results further indicate, the use of neutral syllables are employed most frequently, and



the preferred musical concept for instruction was indicated to be articulation. Interestingly the least preferred concept was intonation. Further investigation reveals that educators who use vocalization practices prefer a play/sing/play method of instruction and their students often echo the director. Eighty four percent of the educators reveal musical examples are demonstrated to their students in phrases rather than one note at a time. in conclusion, educators proclaim a clear understanding of the methods and procedures required for vocalization instruction, and further indicate an uncertainty of procedures for implementation.

Conclusions

Results from this investigation support the use of vocalization in an instrumental setting. Based on data obtained from MAP scores, it was concluded that active involvement in instrumental music classes may result in increased levels of sensitivity to the melodic line. Data obtained from analysis of SST and PTR results show significant correlation to the experimental treatment in three of the tests given. Mean scores for all but one test favor the experimental treatment over the control group treatment. The conclusion is that vocalization with tonal patterned instruction will enhance beginning instrumental conception and performance of articulation and phrases over note to note instruction. Data presented in Table 1.1 show a higher composite mean score for the concept of phrasing when compared to the mean score of articulation. It was concluded the experimental treatment may have a more positive effect on phrasing rather than articulation.



Recommendations

Recommendations drawn from conclusions pertaining to the extent to which vocalization is used in West Virginia are 1) research investigating the perceived effectiveness ratings in comparison to the frequency of use,

- 2) research suggesting the most effective procedure for implementation,
- 3) research defining the most effective methods and styles of instruction and,
- 4) research correlating musical concepts to student achievement levels.

Recommendations drawn from conclusions pertaining to vocalization presented with tonal patterned instruction are, 1) research defining a sequential approach of instruction at all levels of education, 2) research to develop beginning instrumental method book which regularly include vocalization exercise, 3) research defining the parameters of tonal patterned instruction applicable to all levels of instruction, 4) additional studies with larger samples at different grade levels and, 5) comparative studies with homogeneous and heterogeneous instrumentation's with longer time frames for the study.



BIBLIOGRAPHY

BOOKS

- 1. Apel, Willi. <u>Harvard Dictionary of Music</u>, Cambridge: Harvard University Press, 1972.
- 2. Balent, Andrew. <u>Sounds Spectacular: Band Course.</u> Carl Fisher, New York, 1991.
- 3. Casey, Joseph L. <u>Teaching Techniques and Insights for Instrumental Music Educators.</u> Chicago: GIA Publications Inc., 1993.
- 4. Colwell, Richard, <u>Handbook of Research on Music Teaching and Learning a Project of the Music Educators National Confrence</u>.

 New York: Schirmer Books, 1992.
- 5. Colwell, Richard. <u>The Teaching of Instrumental Music</u>. New York: Meredith Corporation, 1969.
- 6. Corbett, Donald L. <u>Teaching Wind and Percussion instruments: A Course Study.</u> Reston, Virginia: MENC, 1991.
- 7. Gordon, Edwin E. <u>Learning Sequence in Music: Skill Content and Patterns.</u> Chicago: GIA Publications Inc. 1984.
- 8. Gordon, Edwin E. <u>Musical Aptitude Profile</u>. GIA Publication Publications, Chicago, 1965.
- 9. Leonard, Charles and Robert House. <u>Foundations and Principles of Music Education</u>. 2nd ED. McGraw-Hill Inc., 1972.



- MENC. What Works: Instructional Strategies for Music Education.
 Reston, Virginia: Music Educators National Confrence, 1989.
- 11. Merrion, Margaret, ed. What Works: Instrumental Strategies for Music Education. Reston, Virginia: MENC, 1989.
- 12. Mursell, James and Mabell Glenn. <u>The Psychology of School Music Teaching</u>. Silver Burdett: NY 1931.
- Schleuter, Stanley L. <u>A Sound Approach to Teaching Instrumentalists:</u>
 <u>An Application of Content and Learning Experiences</u>. The Kent State University Press, 1984.
- Texter, Merry. <u>Musicianship in the Beginning Instrumental Class</u>. Reston, Virginia: MENC, 1979.
- 15. Timm, Everett L. <u>The Woodwinds: Performance and Instructional Techniques.</u> Boston, Allyn and Bacon Inc. 1964.

JOURNALS

- 16. Bennett, Peggy D. "Children's Pattern Perception, Accuracy, and Preference in Three Response Modes." <u>Journal of Research in Music Education</u>. 39, (Nov. 1991) 74-85.
- Burton, John Bryan. "A Study to Determine the Extent to Which Vocalization is Used as an Instructional Technique in Selected Public Schools; Public Junior College, and State University Band Rehearsals." 23, no. 2 (Spring 1988): 30–35.



- Dickey, Marc R. "A Review of Research on Modeling in Music Teaching and learning." <u>Council for Research in Music Education</u>. 124 (Summer 1993): 27–39.
- 19. Elliott, Charles A. "Effects of Vocalization on the Sense of Pitch of Beginning Band Class Students." <u>Journal of Research in Music Education.</u> 22, no. 2 (Summer 1974): 120–128.
- Fortney, Patrick M. "The Effects of modeling and Silent Analysis on the Performance Effectiveness of Advanced Elementary Instrumentalists." <u>Research Perspectives in Music Education</u> 3 (Fall 1992): 18-21.
- 21. Griss, Peter. "Teaching Musically Through Rhythm." <u>Claavier</u>. 33 (Nov. 1994): 20-24.
- 22. Grutzmacher, Patricia Ann. "The Effect of Tonal Pattern Training on the Aural Perception, Reading Recognition, and Melodic Sight-Reading Achievement of First Year Instrumental Music Students," <u>Journal of Research in Music Education</u>. 35 (Nov. 1987): 171-181.
- 23. Johnson, Dennise L. "Singing-Instrumentally Speaking" <u>The Instrumentalist.</u> 38 (1983): 82-84.
- Karjala, Eugene. "Putting Research to Work in the Music Classroom."
 Music Educators Journal. 77 (May 1991): 44–49.



- MacKnight, Carol B. "Music Reading Ability of Beginning Wind Instrumentalists After Melodic Instruction" <u>Journal of</u> <u>Research in Music Education</u>. 23, no. 1 (Spring 1975): 23–24
- Nimmo, Douglas. "Effective Rehearsing With the Instrumental Music Ensemble: A Case Study." <u>Council for Research in Music</u> <u>Education</u>. 113 (Summer 1992): 57-63.
- Noble, Robert F. "Effects of a Concept Teaching Curriculum on Performance Achievement in Elementary School Beginning Bands." <u>Journal of Research in Music Education</u>. 19 (Fall 1970): 209–215.
- 28. Robinson, Mitchell. "To Sing or Not to Sing in Instrumental Class."

 <u>Music Educators Journal</u>, 29 (July 1996): 17–47.
- 29. Shoop, Stephen. "Improving Young Bands." The Instrumentalist. 47 (Nov. 1992): 45-48.

UNPUBLISHED DISSERTATIONS

30. Barbosa, Joel. <u>An Adpation of American Band Instruction Methods to Brazilian Music Education, Using Brazilian Melodies</u>. Ph. D. diss., University of Washington, 1994.



- 31. Davis, Lapointe Manuel. The Effects of Structured Singing Activities and Self-Evaluation Practice on Elementary Band Student's Instrumental Music Performance, Melodic Tonal Imagery, Self-Evaluation, and Attitude. Ph. D. diss., The Ohio State University, 1981. Abstract in Dissertation Abstracts International 42 (1981): 07A.
- 32. Dunlap, Michael Paul. The Effects of Singing and Solmization Training on the Musical Achievement of Beginning Fifth-Grade Instrumental Students, Ph. D. diss., University of Michigan, 1989 (Ann Arbor, UMI, 1985), 43.
- 33. Gamble, Denise K. <u>A Study of the Effects of Two Types of Tonal Pattern</u>

 <u>Instruction on the Audiational and Performance Skills of First-Year</u>

 <u>Clarinet Players.</u> Ph. D. diss., Temple University, 1989. <u>Dissertation</u>

 <u>Abstracts International</u> 50 (1989): 893.
- 34. Grutzmacher, Patricia Ann. The Effect of Tonal Pattern Training on the Aural Perception, Reading Recognition and Melodic Sight Reading Achievement of First Year Instrumental Music Students, Ph. D. diss., Kent State University, 1985. Abstract in Dissertation Abstracts International 46 (1985): 05A.
- 35. Kendall, Michael Jay. The Effects of Visual Interventions on the

 Development of Aural and Instrumental Skills in Beginning

 Fifth Grade Instrumental Students: A Comparison of Two

 Instructional Approaches, Ph. D. diss., The University of Michigan,
 1986. Abstract in Dissertations Abstracts International 47

 (1986): 06A.



- 36. Schlacks, William Frederick. <u>The Effect of Vocalization Through an Interval Training Program Upon the Pitch Accuracy of High School Band Students</u>, Ph. D. diss., University of Miami, 1981. Abstract in <u>Abstracts International</u> 42 (1981): 08A.
- 37. Smith, Eddi R. <u>The Effects of Vocalization on the Intonation of College Wind Performance</u>, Ph. D. diss., Florida State University, 1984. Abstract in <u>Dissertation Abstracts International</u> 45 (1984): 09A.
- 38. Whitner, William Thomas. An Experimental Study of a Comprehensive

 Approach to Beginning Instruction in Instrumental Music, D. Mus.

 Ed., University of Indiana, 1980. Abstract in Dissertation Abstracts

 International 42 (1980): 04A.

ERIC DOCUMENTS

- 39. Fortney, Patrick M. The Effect of Modeling and Silent Analysis on the Performance Effectiveness of Advanced Elementary Instrumentalists. ERIC, 1992. ED375 034.
- 40. Noble, Robert. A Study of the Effect of a Concept Teaching Curriculum on Achievement in Performance in Elementary Schools Beginning Bands. ERIC, 1969 ED028 189.

UNPUBLISHED SOURCE

- 41. <u>Music Education Catalog.</u> GIA Publications Inc. 1996.
- 42. Randolph County Comprehensive Educational Facilities Plan, Revised 1990. Randolph County Schools.



43. West Virginia Schools Education Directory, West Virginia Department of Education, Pub. 1996. Henry Marockie.



APPENDIX 1

PERMISSION TO CONDUCT RESEARCH - REQUEST FORM

September 4, 1996

Dear ,

Pending your approval, I will be conducting a research project at North and Jennings Randolph Elementary Schools, slated to begin on September 9, 1996. The research in question is for partial fulfillment of a masters thesis approved and conducted through Salem-Teikyo University. The research will conclude on October 18, 1996.

Participants involved in the research will include only fifth grade beginning band students. Parents of each student will be notified of my intentions prior to the initiation of the study. a pretest and post-test will be given as a necessity for statistical comparisons of data generated during the study.

Sincere thanks for your consideration of this matter.

Steve Lee



APPENDIX 2

EXPERIMENTAL GROUP INSTRUCTIONAL PROCEDURES FOR HOME REHEARSAL

PRACTICE PROCDURES - E

Dear Band Member,

The rehearsal procedures listed below are to be followed when practicing your instrument at home. Each time you sit down to practice you should:

- 1) Posture sit up straight with both feet on the floor. Check your hand position and location of the mouthpiece to see if they are located in the correct place as discussed in class.
- 2) Warm-up Breathe deep and play long tones for two or three minutes before you begin preparing for your lesson. Rest shortly between each pitch. Try to achieve a smooth controlled tone with a pleasing sound. Sing the assigned tonal pattern in complete phrases on the syllable "ee" or "tee" as they apply, then play the pattern on your instrument. Repeat the procedure until you are comfortable with it.
- 3) Prepare for Weekly Assignments Be sure you are using the correct fingerings for notes by comparing them with examples at the top of page in your book. Practice each number or song by identifying patterns. Divide the song into phrases, repeat, then continue to the next phrase until the entire selection is completed. Always sing each example before you play it on your instrument then repeat



- it. The key to success is:
 - a. slow and steady
 - b. one phrase at a time
 - c. repetition
 - d. work for speed

A Note to Remember:

The more you practice the better you <u>can</u> be, but the more you practice correctly the better you <u>will</u> be!

Sincerely,

Steve Lee

Director



Х

APPENDIX 3

EVALUATION TESTS FOR SST

Lesson Two

Number Nine:



Lesson Three

Number Nine:



Note: Examples above are illustrated as written for trumpet part only. Parts for other instruments included in this selection are written a third below. The melodic line starting on the tonic for example, is written for the saxophone. Both selections by Andrew Ballent were intended for use as a duet.



APPENDIX 4

EVALUATION SCORE SHEET FOR SST

										<u>9 - S</u>	ound Spectacular										
Student			rs I			1	Err				Students		ror				Brrors In				
Identification		<u>tio</u>	<u>cula</u>	<u>tion</u>		ا	Phr	<u>asi</u>	uđ_		Identification	<u>Articulation</u>				Phrasing					
Number	0	_1	1	<u> </u>	<u>, </u>	10	<u>l</u>	<u> 7</u> 1	<u> </u>	. 	Number	10	<u> </u>	. 2	3		10		7_	<u> </u>	_1
1	i 	 	 	i I	i I	i i	l 1	 	1	1	20	1	(}	!) }	1	 		1 1 1 1	
	' [,]		<u> </u>	<u> </u>		¦	<u>'</u>	¦	¦	.' '		-' 	' !	<u>'</u>		' 	.¦	' 		¦-'	
2			}	Ì		i		ļ	i I	i	21	i		1			i			i	
				ı —	1	ı	ı	1	ı	1		1					1				
3		_	١		!	!	!	<u> </u>	<u> </u>	<u>!</u>	22	_اِ_	!	<u> _</u>			!	_		1_!	
					i	i	i	i	!		23	1	!	1			1			!!	
		_	<u>'</u> —	¦	¦—	Ì	<u>'</u> —	¦	¦	.}	<u></u>	-¦	¦	_		 	-	-		_ (
5	, ,) [! }	! !	! 	! 	: 	1		ì	24	ì	; }	}		 	ì		I .	; ;	
	'' 		·	; 		<u></u>	;	i —	i	i		1	i				1	<u> </u>		i - i	
6			١	I	l	1	I	١	١	1	25	_1	I			l	. _			1_1	
				ł	I	ł	ł		ł.	1	•	1	1				1				
		Щ	<u> </u>	<u> </u>	<u> </u>	!	<u> </u>	!-	!	.¦	26	-¦	}				.¦	_		! - !	
81	 	 	i 1	ì	 	 	i I	 	 	1	27	1	i I	(! !		i I	1	1 1		1 (1 1	
	'	-		' !	¦	¦	'	' I	¦	¦		-¦	' -	<u>'</u> '			·¦	'		<u> </u> -	
9	j			Ì	į	1		i		!	28	_i					<u>i_</u>			i_i	
	<u> </u>	<u> </u>	_	ı —	1	1	ı	1	1	1		1									
101		_		ا	I	!	١	I_	!	!	29	.ļ. <u></u>	!				<u> </u>			_	
					i	!	!	i	!	i	30	i .	} •				1			1 1	
11	!	_		!—	<u> </u> —-	<u> </u>	<u>'</u>	¦	Ì	.¦	30	-¦	<u>'</u>	!!	_		·	 		! _	_
12	(! 	! 	 	! 	! 	! 	1	31	ì	! !	 		 	1) ! 		; ; ;	
·	<u></u>		_	i —	;—	;—	i —	i-	' I	' 		-i	;	;;			i	i		ΪΪ	
13[لـــا			<u> </u>	<u> </u>	i	Í	İ_	i	Í	32		I	_			<u> </u>	_		ا_ا	
				l	l	l			l	1		1	ł	1 1							
14	<u>!</u>		<u> </u>	!	!—	!—	!	!	!	! 	33	-!	!	!-!			·!!		—	! - !	
151				 	 	 	! !	 	 !	1	34	1	(1 1 1 1		 	1 1	 		 	
			<u>'</u>	¦—	¦—	'	¦	¦	¦—	' '		-¦	' I	''	-		·	 		'-' 	
16	i			İ	İ	İ		 	I	i	35	.i								_	
		-		1		ı	1	1	ı	1		1	1							1	
171				<u> </u>	<u> </u>	!	 	!	<u> </u>	<u>!</u>	36	<u>. </u>		<u> _</u>			<u> </u>	<u> </u>		<u> _</u>	_
					i	i		1	İ	i	22	1				 				i !	
18	<u> </u>			<u> </u>	<u> </u>	<u> </u>	!	<u> -</u>	!	·¦	31	-	'	 			·¦	 	—	_	_
19	;	 !	 	 	 	! 	(! }	! }	1	38	i	1		1	! 		, , , ,		: (!	



EVALUATION SCORE SHEET FOR SST

l										11 -	Sound Spectacular										
Student			rs I			!			In		Students		rror				Brrors In				
Identification		<u>rti</u>	<u>cula</u>	tion ?		!—	Phr	<u>as i</u>	nq_		_ Identification	Articulation				l_Phrasing					
<u>Number</u>	1 0	<u>1</u>	<u> </u>	<u> </u>	<u> 1</u>	1 0	<u> </u>	1	1	_ 	<u> Number</u>	10	<u> </u>	<u> </u>	<u>.</u> .		10	<u> 1</u>	- 2	3	
' 1	! !	<u></u>	_	<u> </u>	<u> </u>	 	 				_ _ 20	_		 	 		<u> </u> _	 		 <u> </u>	'
 2	 	 	} }	} }	 	! !	1	1	1	1	i ; 21	1	1	1	} 	 	1	1	1		
	<u> </u>	i	<u> </u>	<u> </u>	: !	: !	! !	<u> </u>	<u></u>	<u> </u>		- <u> </u>	' —— 	<u> </u>	<u> </u>		İ	<u> </u>	!		į –
3	! !	i	! !	 	! !	! 	! !	! 	¦ 	-¦	_l <u>22</u>	-¦ 	<u> </u>	 	i I	! 	.! 	! 	! !	.!_! 	
1	_	!			ļ	!—	!	<u> </u>	ļ	-!	_123	-	<u> </u> -	Ļ	<u> </u>	!		ļ	ļ	_	
55	<u> </u>	! !	 	' 	! !		<u> </u>	<u> </u>	ļ	<u> </u>		_	<u> </u>	! !	! !	! !	.	' !	í Í	. _	
 6	 	! !	 	 	l 	! !	! !	! !	 		1 <u>25</u>	 _	 	! !	; 	 	 	 	! !		_
 <u> </u>	 	; []			 	} 	 	1 	! !	 	1 126	 -	 	 	ł I	 	 	i i	! 		
8	 	 			 	 	 	 	 	1	27	 	 	 	 	 	 	 	 	 	
9					 		 				1 28	1	 	 	 	 		 	 		
10						_	!	į –	i –	<u> </u>	1 29	- <u>;</u>	; !	<u> </u>		!		' !		; _ ; 	
		'' 					<u> </u>	<u> </u> -	<u> </u>	<u> </u>	1	- '	<u> </u>		<u></u>	<u> </u>	' 		' 	-	
11		 	¹			 	 	 	! 	.¦	_130	- 	 	 	 	 	!! 	-		_	
12								<u> </u>	<u> </u>	<u> </u>	_ 31	-	<u> </u>	_ -		<u> </u>				1_1	
13								<u> </u>	! !	. <u>!</u>		·!!		!!			<u> </u> _			<u> </u>	
141	 	 	 	 	 	 	 	 	! !	 	 <u>33</u>	.	l 	 	 	 	 		 		
151	 	 	 	ا اا	 	 	 	 	l l	 	 	 	 	 	 	l 	 	 <u> </u>	 		
16	 		 		 		 	} 	 	 	I I 35		 		 	 		 	 		
171			-	[i	 	 		 	 			 	 		 	i		
18i	' 	' 	' 	'	' 	 		 !	 	 	31	 	—_ ' 	 							
I	'	'	<u>'</u>	'	¹	' 		-	' !	¦	-		'' 	 	 -	' -	<u> </u>	<u>_</u>		<u> </u>	_
19	I	1	I	ا				i	i	١	138	اا		<u>_</u>			اا	1		1_	



APPENDIX 5

EVALUATION SCORE SHEET FOR PTR

										RVISE	TEST EXAMPLE 1										_
Student Identification			rs I			ļ	Brrors In Phrasing					B							ors		_
Number	<u></u>	7	s Cala	CION 4	-5	!	<u> </u>	<u>ası</u> 1	nq_	5	_ Identification Number	Articulation 1 2 3 4 5				Phrasing 1 2 3 4 5					
- CONTRACT		<u> </u>	<u> </u>	<u> </u>	<u>,</u>	1	<u> </u>	<u>,</u>		1	- BURDEL	1	<u> </u>	<u>ا</u> د	1		1 1	1	 	11	
1		_	<u> </u>	<u> </u>	<u> </u>	<u> </u> _	<u> </u>	ļ_	Ì	<u> </u>	20	į	i !	i	<u> </u>	!	<u>i_</u>		<u>.</u>	<u>i_i</u>	
22	! !	 	 	!	! !	! !	! !	! !	 	<u>!</u>	21	! <u> </u>	! !	! !	! !	 	! !-	! !	 	 <u> </u>	
3	!!	 	 	! !	! !	! !	! !	! !	! !	! -!	22	! !	! !	! !	! !	! !	! !	 	 		
1	 		 	! !	! !—	! !	! !	! !_	 	 	23	! 	! !	 	! !	! !	! .!i	 	 		ا اا
5	!	!		 !	 	! !	! !	! !—	! !	! .!	1 1 <u>24</u>	! !!	 	 	 	 	 	 :	 		ا ا
6	 	_!	 	 	! !	! !	 	! !	! !	! .!	1 25	! !!	l I	 i	 	 	 	 			-
1	 	_			<u> </u>	! !	 	! !—	! !	! 	126	 	 	! !!	 	 	 	 		 _ .	
8	 !	!	!	 	 	 	_	! !	! !	! .!	27	 		 	 		i i_			 _ .	ا ا
99	 !	 	ا اا	 		!		! !	 	 	! 28	 	 		 		 _	 		 _ .	
101	 	_		 				 	 	! !	l .i1	 			 		 	 		 _ ₋	ا ا
11	 	! !	 	ا اا		 		 	! !	 	 11	 	 	 	 			_		 _ .	 -
12	!	_!	! !	! !		 !		 	 	! !	! !1	 		 	ا اا		 _	_			ا ا_
13		<u> </u>	ا لا	_		 		 _	 	l l <u></u>	 	 	ا اا	 _	 		 _	ا ا		 _ _	ا ا_
ا ا11	_	 	ا اا	! !	_		<u></u>	! !!		l 	 	 	ا اا	 	ا اا		 _	ا ا		 _ _	ا ا_
15!	!	ا !	ا !	! !	! !	!	ا اِــــ	_! !		! !	 	ا اا	ا ا	 				ا ا	ا اا		ا ا_
16!	_! _!	! -!-	 	!	! !	_! !	! !	_! !		! !	!! !!	 	 -	 	 		 _!	 -	ا ا	 -!-	 -
! ¹⁷ !	! !	_! _!.	!	!	_ <u> </u> _!	! !	 !	!		 	 	_! !	! !	 	ا !		ا اِـــ	 -	ا ا	_!_ _!_	 -
18	! !	 !	_! _!	! !	ا !	_! !	 !	_! _!			37	!	ا !	_!	 	ا اا	_	ا !	ا ا	_!_ -!_	 -
i 191	I I	_ ,	 	 	i 	ا اا	 	 -			! !!	 	 	 	ا اا	 	_	 	ا اا	 - -	 -



APPENDIX 6 MUSICAL APTITUDE PROFILE ANSWER SHEET

				150		- TONAL	1 84 3 (T.F.D.Y		
	860	IN H	ERE			•				
PAPEI	14 5	0	· .	64.	0		ċ	<u>ئ</u> د16ء ئے۔	ō	ċ
MECODA 111	13 :	-5	5	68 5	-	- 11a	_	~ 16a. ·		
PRACTICE									_	_
SONGS	2 - 5	ē	ċ	74.	₽.	≟ 12∧. <u>≒</u>	ō	3 1745	<u>.</u>	
145 S &	2 5	-	-	73 =	- 5	± 12s ±	-	C 173C	-5	Ġ
18		-	-	-					_	
	3 + !:	.º	3	82 -	õ	² 13a. <u>L</u>	.0	- 18a <u>-</u>	Ö	ċ
	3₃ ⊃		-2	88.	:	= 13a =	.=	D 1840	ō	
_	J	_	`-	00 _		130 _	-	Ç 1 0 -C	_	• •
	445	Ď	3	9a.L	õ	≟ 14× ¹	્	€ 1945	9	ċ
						3 148 B	0	C 198 C	_	:
	43]	Ú	ن	98 <u>-</u>	-=	_ 140 _		C 1930		_
	5.5	9	•	10.4	<u>.</u>	-2 15×.5	.2	20 A S	3	<u>.</u>
	_						_	= 20° =		
	53 :	IN HE	<u> </u>	108 =	<u></u>	⇒ 158 ⇒		205 _		Ċ
2435 11				, ι	٥	7,,,,	<u>@</u>	ئ _{ە 16} ئ	9)	ċ
HAPMONY (T	14 =	Ŝ		6A.	3.	21145 - 1145	<u> </u>			
	13 0	0	0	6a :	Ξ	C 118 C	=	○ 163	\Box	C
SONGS	٠ ،	0	,	ب ا	٥	2 30 1	0	21745	9	,
	2 4 🛬	Ĉ	_	745	<u>o</u> ()	ئے 12a	0		Š	Ė
145 8 6	2₃⊃	С	0	78.⊜	0	C 128C	С	o 173 o	0	0
100 0 0	_ L	P	,	ء ا	Đ	, ı	0	, , , ,	D	,
•	37 ₽	0	0	845	ಿ	∂13A&	Ö	2 18×5	Ŝ	0
	3∮ =	J	Ξ	8a.:	=	∵ 13a	2	_ 18a <u>_</u>	Ξ	Ö
			,	_ 1	0) , ,	n	, , _ 1	2	,
	44 ±	ŷ	-	5× آ	<u>.</u>	- 14x L	õ	1945	97	
	43 🗆	\supset	J	99 🖫	=	∴ 14a ⊃	÷	= 19a =	O	=
_		_	,		_	, .	0	2 _ 1	2	,
	5 à 🗄	.0	É	آ ۲O۱	ž	- 15x 🛬	2	- 20 x =	õ	2
	5₃ ా	C	\circ	10a 🚍	Ξ	_ 15s _	_	7. 20s <u>r</u>	Ξ	
									_	
:				TEST	₹ -	RHYTHM	MAC			
:		IN HE				RHYTHM		GERY	3	
PART I	1 = 5	12 HE		1831 64 ⁵	٦ - و		IMAC D	3 164 5	0'1	٠,٠
TEMPO (R)		0 (10 Z				RHYTHM		GERY	0:1 (1	
TEMPO (R)	14 5 13 D	0 (10	·′) ()	6a :	01) ()	2 114 5 2 114 5 2 118 C	ין יים	C 16a =	Ξ	υ ċ•
PRACTICE SONGS	1 · · · · · · · · · · · · · · · · · · ·	وَ	·/) ()	64 = 68 = 74 &	01) () 0()	21145 = 118C	0') (' 0()	2 164 5 2 164 5 2 164 5 2 174 5	0 of	0. u ú.
TEMPO (R)	14 5 13 D	0 (10	·′) ()	6a :	01) ()	2 114 5 2 114 5 2 118 C	ין יים	C 16a =	Ξ	υ ċ•
PRACTICE SONGS	1 ± 5 13 ⊃ 2 ± 5 25 ⊃	01 00 0 (10	0 0 0 0 0 0	64 5 68 5 74 5 78 0	00 0 00 0	2 11 A 5 = 118 C 2 12 A 5 C 128 C	0) () 0() ()	2 16 a 5 c 16 a 5 c 16 a 5 c 17 a 5 c 1	വംഗ	00.00.
PRACTICE SONGS	1 · · · · · · · · · · · · · · · · · · ·	00 (10	-0 0 -0	64 = 68 = 74 &	01) () 0()	RHYTHM : 2114 5	0') (' 0()	C 164 5 C 164 5 C 174	0 of	0. u ú.
PRACTICE SONGS	1 ± 5 13 ⊃ 2 ± 5 25 ⊃	01 00 0 (10	0 0 0 0 0 0	64 5 68 5 74 5 78 0	00 0 00 0	2 11 A 5 = 118 C 2 12 A 5 C 128 C	0) () 0() ()	2 16 a 5 c 16 a 5 c 16 a 5 c 17 a 5 c 1	വംഗ	00.00.
PRACTICE SONGS	1 ± 5 13 D 2 ± 5 29 C 3 ± 5 3 ±	01) 00 00 00 00 00	,00,00,00	645 685 780 780 845 83.5	011 00 () () 00 ()	RHYTHM : 114 5 = 118 0 0 124 5 0 124 5 0 128 0 0 134 5 0 138 5	00 (10 (1) (1) (1)	6ERY 	0 00 0 00 0	00.00.00.
PRACTICE SONGS	1 ± 5 13 D 2 ± 5 D 2 5 C 3 ± 5 D	00 00 00 00	,00,00,00	64 \(\frac{5}{4} \) 68 \(\tau \) 78 \(\tau \) 84 \(\frac{5}{4} \)	00 () () 0()	RHYTHM : 2114 5	(ام (۱ (ام دا درم	C 164 5 C 164 5 C 174	0 00 0 00	0. 00. 00.
PRACTICE SONGS	1 ± 5 13 D 2 ± 5 29 C 3 ± 5 3 ±	01) 00 00 00 00 00	~') 0 ~0 0 ~0	645 685 780 780 845 83.5	011 00 () () 00 ()	RHYTHM : 114 5 = 118 0 0 124 5 0 124 5 0 128 0 0 134 5 0 138 5	00 (10 (1) (1) (1)	6ERY 	0 00 0 00 0	00.00.00.
PRACTICE SONGS	1 x 5 1 3 0 2 x 5 0 2 5 0 3 3 5 1 4 x 5 0 4 3 0	0) (10 0) (10 0) (10 0)	~00 ~00 ~00 ~00	645 685 780 845 945 986	011 (1) 0(1) (1) (1) (1) (1)	21145 21180 21245 01280 21345 21345 21345	0) () 0() () 0() () 0 ° ()	164 5 0 164 5 0 174 5 0 0 174 5 0 0 184 5 0 0 184 5 0 0 193 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 00 0 00 0 0 0 0	0 ~ 0 0 * 0 0 * 0 0 *
PRACTICE SONGS	1 x 5 1 3 0 2 x 5 0 0 3 x 5 0 3 3 x 4 x 5 0	01) 0 0 () 00 () 01)	~00 ~00 ~00 ~00	645 681 740 780 845 841 945	011 (1) 0(1) (1) (1) (1) (1)	RHYTHM 2 114 5 2 124 5 2 124 5 2 138 5 2 138 5	07 () 0() () 0() () 0.	164 5 0 164 5 0 174 5 0 0 174 5 0 0 184 5 0 0 184 5 0 0 193 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 193 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11 of 0 of 1 of	. 00.000 no.
PRACTICE SONGS	1 x 5 1 3 0 2 x 5 0 2 5 0 3 3 5 1 4 x 5 0 4 3 0	01) () 0 () () 0 () () 0 ()	· 0 0 · 0 0 · 0 0 · 0 · 0	645 685 780 845 945 986	011 11 00 (1) 00 (1) 01	21145 21180 21280 21280 21380 21380 21380 21445 21445	0) () 0() () 0() () 0 ° ()	164 5 0 174 5 0 174 5 0 184 5 0 184 5 0 184 5 0 184 5	0 00 0 00 0 0 0 0	. 0 . 0 0 . 0 0 . 0 c .
PRACTICE SONGS	1 - 5 13 13 13 13 13 13 13	ق (ره ن زره ن نه در نه در نه در نه	7) 0 70 0 70 0 70 0 70 0 RE	645 685 785 780 885 885 985 985 1085	011 01 0 0 0 0 0 0 0 0	2 114 5 0 128 0 128 0 13	011 000 000 000 010 010	164 5 164 5 174 5	0 of 0 of 0 or 0 or 0	01-0-00-00-00
PRACTICE SONGS 14 5 0 0 0 14 5 0 0 24 5 0 0 PRACTILE	1 - 5 13 13 13 13 13 13 13	ق (ره ن زره ن نه در نه در نه در نه	7) 0 70 0 70 0 70 0 70 0 RE	645 685 785 780 885 885 985 985 1085	011 11 00 (1) 00 (1) 01	2 114 5 0 128 0 128 0 13	011 000 000 000 010 010	164 5 164 5 174 5	ده داده داده داده داد	1 - 0 - 00 - 00 - 00 -
PRACTICE SONGS 14 5 0 0 14 5 5 0 24 5 0 0	1 - 5 13 0 2 - 5 0 3 - 5 3 - 5 3 - 5 5 5 0 5 5 5 5 5 5	00 x 0 (10 0 (10 0 0 00 0 0 (10	70 70 70 0 70 0 70 0 70 0 RE 70	6A 5 7 7 8 0 0 10 8 8 8 8 10 8 10 8 10 8 10	01 11 0(1) 0(1) 0 1) 0 0 1 0 01 0	2114 5 0128 0 128 0 128 0 128 0 138 0 138 0 144 5 0 158 0 158 0 148 5 0 158 0 0 158 0 0 148 5 0 158 0	00 (1 00 (1) 00 (1) 00 (1) 00 (1) 00	164 5 164 5 174 5	0 of 0 of 0 or 0 or 0	01-0-00-00-00
PRACTICE PRACTICE SONGS 14 5 0 0 14 5 5 PRACTICE PRACTICE PRACTICE	1 ± 5 13 D 2 x 5 D (2 3 x 5 D) 3 x 5 D (3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	700 700 700 700 700 RE700	645 5 78 5 0 5 104 5 104 64 64 0	011 (1 0(1 (1) 0(1 (1) 0 (1 (1) 0 (1 (1) 0 (1 (1) 0 (1) (1) 0 (1 (1) 0 (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1) (1) 0 (1	21145 21245 01280 21380 21380 21380 21380 21380 21380 21380 21380	0.00 0.00 0.00 0.00 0.00 0.00	CERY C 164 5 C 164 5 C 174 5 C 174 5 C 178 C 7 184 5 C 188 C 7 194 5 C 198 C 7 204 5 C 209 C	0.00 0.00 0.00 0.00 0.00	0. 0. 0. 0. 0. 0. 0. 0.
PRACTICE SONGS 1A D C C C C C C C C C C C C C C C C C C	1 ± 5 13 D 2 x 5 D (2 3 x 5 D) 3 x 5 D (3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	700 700 700 700 700 RE700	645 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		21145 21245 01280 21380 21380 21380 21380 21380 21380 21380 21380		CERY 164 5 C 164 5 C 174 5 C 178 5 C 188 0 C 188 0 C 188 0 C 188 0 C 198 0 C	0.00 0.00 0.00 0.00 0.00	0. 0. 0. 0. 0. 0. 0. 0.
PRACTICE SONGS 1A D C C C C C C C C C C C C C C C C C C	1 - 5 13 2 - 5 2 2 - 5 2 - 5 2 - 5 2 2 - 5 2 2 - 5 2 2 2 2 2 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	~00 ~00 ~00 ~00 ~00 	645 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		21145 C1245 C1245 C1245 C1245 C1345		CERY C 164 5 C 164 5 C 174 5 C 174 5 C 178 C 7 184 5 C 188 C 7 194 5 C 198 C 7 204 5 C 209 C	0 0 0 0 0 0 0 0 0 0 0	0. 0. 0. 0. 0. 0. 0. 0.
PRACTICE SONGS 14 5 0 0 24 5 0 0 PART II METER (R2) PRACTICE SONGS	2 A S D C S D C S A S D C S D C S A S D C S	$0 \ (0 \ 0) \ $	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 0 8 8 0 9 4 5 1 0 0 8 0 6 6 0 7 4 5 1 7 8 1 1		21145 01245 01240 01345 01345 01345 01345 01345 01345 01345 01345 01345		C164 5 C164 5 C164 5 C174 5 C1	0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	2 A S D C S D C S A S D C S D C S A S D C S	$0 \ (0 \ 0) \ $	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 0 8 8 0 9 4 5 1 0 0 8 0 6 6 0 7 4 5 1 7 8 1 1		21145 01245 01240 01345 01345 01345 01345 01345 01345 01345 01345 01345		C164 5 C164 5 C164 5 C174 5 C1	0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0. 0. 0. 0. 0. 0. 0. 0.
PRACTICE SONGS 1A S O O 1A S O O PART II METER (R ₂) PRACTICE SONGS 1A S O O O O O O O O O O O O O O	1 ± 5	(a) (10) (10) $\frac{1}{2}$ (10) (10) (10) (10) (10) (10)	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 5 84 5 94 5 108 5 7 6 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	011 (1 0(1 (1) 0(1 (1) 0 (1 (1) 0 (1 (1) 0 (1 (1) 0 (1 (1) 0	2114 5 0128 0 128 0 138		CERY C 164 5 C 164 5 C 164 5 C 174 5 C 184 5 C 188 C	0.00 0.00 0.00 0.00 0.00	1 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	2 A S D C S D C S A S D C S D C S A S D C S	(a) (10) (10) $\frac{1}{2}$ (10) (10) (10) (10) (10) (10)	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 0 8 8 0 9 4 5 1 0 0 8 0 6 6 0 7 4 5 1 7 8 1 1		21145 01280 01280 01380 01380 21380 21445 01480 21545 01180 21285 01285 01385 01385		C164 5 C164 5 C174 5 C174 5 C184 5 C1	0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	1 - 5 13 2 - 5 25 13 2 - 5 25 13 2 - 5 25 13 2 - 5 25 25 25 25 25 25	() (a () (b () (b () (b () (a () (b	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 0 84 0 94 5 0 64 0 74 5 0 78 1 84 5 0 84 0 84 0 84 0 84 0 84 0 84 0 84		21145 01280 01280 01380 01380 21380 21445 01480 21545 01180 21285 01285 01385 01385		C164 5 C164 5 C174 5 C174 5 C184 5 C1	0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	$0 \circ (i (\circ \circ) (\circ \circ) (\circ \circ \overset{1}{x}) (i \circ \circ) (\circ \circ (i \circ \circ) (\circ \circ$	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 0 84 0 84 0 84 0 84 0 84 0 84 0 84 0	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	21145 01280 01280 01380 01380 21380 21380 21445 01480 21540 21560 21180 21280 21380 21380 21380 21380 21380	ويال قول با قول با حيث قييل قول جاء يا قال قول	CITA 5 C 164 S C 174 S	$(1-\alpha)^{\frac{1}{2}}(1-\alpha$	5 5 7 5 1 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	1 ± 5 1 3 5 1 (1 ± 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	$0\ 00\ 0\ (0\ 0\ 0)\ 00\ 0) \frac{1}{2} 0\ (0\ 0\ 0)\ 00\ 0\ 0) 0 0 0 0$	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 5 84 5 94 5 7 6 7 8 7 8 8 8 5 9 9 8 5 9 9 8 5 9 9 8 9 9 8 9 9 8 9 9 8 9 9 9 9	0 00 1 0 0 10 0 0 10 0 0 10 0 0 10 0 0 10 0 0 10 0	21145 01240 01240 01240 21340 21340 21340 21340 21340 21340 21340 21345 01340 21345 01340		CERY C 164 5 C 164 5 C 164 5 C 174 C C 174 C C 178 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 198 C	0 or 0 0 0 0 0 0 0 0 0	11 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	1 ± 5 1 3 5 1 (1 ± 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	$0\ 00\ 0\ (0\ 0\ 0)\ 00\ 0) \frac{1}{2} 0\ (0\ 0\ 0)\ 00\ 0\ 0) 0 0 0 0$	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 5 84 5 94 5 7 6 7 8 7 8 8 8 5 9 9 8 5 9 9 8 5 9 9 8 9 9 8 9 9 8 9 9 8 9 9 9 9	0 00 1 0 0 10 0 0 10 0 0 10 0 0 10 0 0 10 0 0 10 0	21145 01240 01240 01240 21340 21340 21340 21340 21340 21340 21340 21345 01340 21345 01340		CERY C 164 5 C 164 5 C 164 5 C 174 C C 174 C C 178 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 188 C C 198 C	0 or 0 0 0 0 0 0 0 0 0	. 35. 57. 11. 33. 01. 3. 00. 00. 00. 00.
PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂) PRACTICE SONGS 1A 5 0 0 1A 5 0 0 PART II METER (R ₂)	1 3 5 0 (2 5 (3 5 (3 5 (3 5 (3 5 (3 5 (3 5 (3 5	$0 \bullet 0 0 \circ ((\circ) () \circ 0 (o o o) (o) (o) (o o (o) o) o)$	10 10 10 10 10 10 10 10 10 10 10 10 10 1	64 5 74 5 84 5 94 5 104	00 () (00 () () (00 () () (00 () () () () () () () () () () () () ()	21145 01240 01240 01240 21340		CITA 5 C 164 S C 174 S	$(1-\alpha)^{\frac{1}{2}}(1-\alpha$	5 5 7 5 1 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0

MUSICAL APTITUDE PROFILE



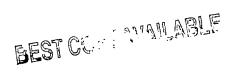
GIA Publications, Inc.



Your scores on the MUSICAL APTITUDE-PROFILE will provide information that will help you and your teacher.

This is a listening test. Musical selections are on a recording. Your answers will be marked on this answer sheet.

Wait quietly for directions.



78



APPENDIX 7 NOTIFICATION SHEET TO PARENTS

September 6, 1996

Dear Parents,

I would like to inform you of a research project I will be conducting at North and Jennings Randolph Elementary Schools this fall. Participants involved in the study will include all beginning band students from both schools. Students from each school will be taught from two different instructional methods and comparisons will be made.

Responsibilities of students for the first six weeks of band instruction are as follows:

- 1. Rehearse at home as prescribed by the director (Parents, ask you child for details)
- 2. Practice at home a minimum of thirty minutes each night, (if other commitments will no allow thirty minutes, do what you possibly can).
- 3. Attend all rehearsals scheduled during school
- 4. Prepare each assignment prior to each lesson

Parents are requested to monitor your child's rehearsal habits at home. If you need further information, or you do not want your child's progress included in the results of this project, please notify me as soon as possible.

Thank you for your cooperation.

Steve Lee



APPENDIX 8 STUDENT SURVEY

Please circle your response to each question.

1.	Do you currently take private lessons on an instrument? (Yes, No) If your response was yes, what instrument are you studying? (clarinet, flute, trumpet, saxophone, trombone, drums, piano, guitar, other)
2.	How many years have you taken private lessons? (0 1 2 3 4 5 or more)
3.	Do you currently take voice lessons? (Yes, No) If yes, how many years? (1 2 3 4 5 or more)
4.	Have you ever taken private music lessons? (Yes, No) If yes, indicate what year (s). (
5.	Are you a member of your school choir? (Yes, No)
6.	Are you a member of any musical organization (ex. church choir) outside

of school? (Yes, No) If your response is yes, please indicate what

organization in which you participate. (



APPENDIX 9

CONTROL GROUP INSTRUCTIONAL PROCEDURES FOR HOME REHEARSAL PRACTICE PROCEDURES - E

Dear Band Member,

The rehearsal procedures listed below are to be followed when practicing your instrument at home. Each time you sit down to practice you should:

- 1) Posture sit up straight with both feet on the floor. Check your hand position and location of the mouthpiece to see if they are located in the correct place as discussed in class.
- 2) Warm-up Breathe deep and play long tones for two or three minutes before you begin preparing for your lesson. Rest shortly between each pitch. Try to achieve a smooth controlled tone with a pleasing sound.
- 3) Prepare for Weekly Assignments Be sure you are using the correct fingerings for notes by comparing them with examples at the top of page in your book. Practice by dividing the song into phrases, repeat, then continue to the next phrase until the entire selection is completed. The key to success is:
 - a. slow and steady
 - b. one phrase at a time
 - c. repetition
 - d. work for speed

A Note to Remember:

The more you practice the better you <u>can</u> be, but the more you practice correctly the better you <u>will</u> be!

Sincerely,

Steve Lee Director



Dear Music Educator.

You have been targeted for this survey because of your expertise in the area of beginning band instruction. Your participation in this study is requested for examination of an instructional technique referred to as vocalization. For the purpose of this study, vocalization, may be identified as a student's active participation in singing of melodic or rhythmic segments or phrases during rehearsal. An attempt is being made to determine the extent to which vocalization is or is not being used in West Virginia, and what instructional parameters are being employed.

Please take a moment out of your busy schedule to complete and return the questionnaire. Your valued judgement will be greatly appreciated. If you would like a summary of the results from this study, please complete the necessary information at the end of the questionnaire before enclosing it in the self addressed envelope.

Again, thank you for your consideration and / or participation in this endeavor.

Very sincerely yours,

Stephen R. Lee

Instrumental Instructor, Randolph County



Questionnaire



Part 1:

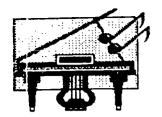
Please answer the following by filling in the numbered circle on the note. Answer as if completing the following statement: Students in my beginning band rehearsals ...

- I disagree strongly
- 2 disagree, somewhat
- 3 agree
- 4 agree somewhat
- 5 agree strongly

1.	echo sing my demonstrations	99999
2.	are actively involved in vocalization practices	00000
3.	sing musical examples on solfege syllables	00000
4.	sing musical examples on neutral syllables	99999
5.	sing musical examples with written prose	00000
6.	sing to improve the following musical skill concepts: rhythm reading	00000
	melodic reading	00000
	sight reading	00000
	intonation	00000
	pitch recognition	00000
	style interpretation	99999
	articulation	99999
ERÎC	phrasing	9999

7	Vocalization, in my opinion, is a viable method	of instruction	0000
8.	Vocalization should be used in chorus classes on	ly	0000
9. vocati	I clearly understand the most effective methods a	•	00000
10. metho	I feel traditional instruction (void of singing) is a d of instruction than vocalization		0000
11. is clea	Implementation of vocalization practices in an in ly understood		0000
Part :	2:		
	Rate your perceived effectiveness of vocalization etely ineffective, 2 = somewhat ineffective, 3 = effective and 5 = completely effective	fective, 4 =	00000
Part :	3:		
13.	I feel the most productive method of instruction i	s:(please check one)	
	sing / play		
	sing / play / sing		
	play / sing		
	play / sing / play		
	play only		
I 4 .	Musical examples are demonstrated to my student	s by :	
	note to note (one note at a time)		
	phrases (two to five notes at a time)	
15. could b	If time permits, please make suggestions on the base implemented into daily band instruction, or why	ick of this page, as to it should not be introd	how you feel singing duced.
	would like a summary of the results please fill out	the following: (please	print)
Name	iddress 2	<u> </u>	BEST COPY AVAILABLE

APPENDIX 1 1 INFORMATION LETTER



From The Musical Desk xi

Steve Lee

AUGUST 27, 1996

DEAR PARENTS:

YOUR CHILD WILL SOON BE GIVEN THE OPPORTUNITY TO BE TESTED FOR THE BAND PROGRAM IN RANDOLPH COUNTY SCHOOLS. TO AID YOUR CHILD IN MAKING A DECISION AS TO WHICH ENSTRUMENT (IF ANY) HE/SHE MIGHT LIKE, ALL INSTRUMENTS WILL BE DEMONSTRATED BY THE INSTRUCTOR. FINAL DECISIONS CAN BE MADE AT "JOIN THE BAND NIGHT" ON SEPTEMBER 4, STARTING AT 6:00PM AT JENNINGS RANDOLPH ELEMENTARY SCHOOL. PLEASE ADHERE TO THE FOLLOWING SCHEDULE: IF YOUR NAME BEGINS WITH A - M, YOUR TIME IS 6:00-7:00, LAST NAMES BEGINNING WITH N - Z IS 7:00PM.

INSTRUMENTS MAY BE RENTED FROM ANY MUSIC STORE, ALTHOUGH MUSIC CITY IN ELKINS HAS BEEN VERY HELPFUL IN THE PAST.

BAND CLASSES FOR ALL BEGINNERS WILL OFFICIALLY START THURSDAY, SEPTEMBER 5, 1996 AT THEIR REGULARLY SCHEDULED TIME.

IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE CONTACT ME AT SCHOOL 636-9181 ANY AFTERNOON FROM 3:30 TO 4:00.

YOURS IN MUSIC.

STEVE LEE, INSTRUCTOR

xxii

APPENDIX 12 RESULTS OF SQR

Question #1 - Students in my beginning band rehearsals echo sing my demonstrations.

<u>Category</u>	1	2	3	4	5
Frequency	3	7	7	5	9
Percent	9	23	23	16	29

Question #2 - Studnets in my band rehearsals are actively involved in vocalization practices.

<u>Category</u>	_1	2	3	4	5
Frequency	3	10	7	4	7
<u>Percent</u>	9	32	23	13	23

Question #3 - Students in by beginning band rehearsals sing musical examples on solfege syllables.

Category	_1	2	3	4	5
Frequency	15	8	7	1	0
Percent	48	26	23	3	0

Question #4 - Students in my beginning band rehearsals sing musical examples on neutral syllables.

<u>Category</u>	_ 1	2	3	4	5
Frequency	6	3	8	5	9
Percent	19	9	26	16	29



Question #5 - Students in my beginning band rehearsals sing musical examples with written prose.

<u>Category</u>	_1	2	3	4	5
Frequency	15	8	4	0	4
Percent	48	26	13		13

Question #6 - Students in my beginning band rehearsals sing to improve the following musical concept skills in.......

		<u>Rhyt</u>	<u>hm Readin</u>	ব	
<u>Category</u>	_1	2	3	4	5_
Frequency	1	6	7	2	15
<u>Percent</u>	_3	19	23	6	48

		<u>Me</u>	lodic Reading	į	
<u>Category</u>	_1	2	3	4	5
Frequency	4	6	7	2	12
<u>Percent</u>	13	19	23	6	39

	<u>Sight Reading</u>							
Category	1	2	3	4_	5			
Frequency	3	4	10	4	10			
Percent	9	13	32	13	32			

<u>Intonation</u>							
Category	1	2	3	4	5		
Frequency	6	6	5	7	7		
Percent	19	19	16	23	23		



xxiv

		<u>Pitc</u>	h Recognitio	<u>n</u>	-
Category	1	2	3	4	5
Frequency	1	5	9	6	10
<u>Percent</u>		16	30	19	32
			<u>Style</u>		
Category	1	2	3	4	5
Frequency	3	7	7	5	9
Percent	9	23	23	16	29
		4	<u>Articulation</u>		
<u>Category</u>	<u> </u>	22	3	4	5
Frequency	0	4	10	7	10
<u>Percent</u>	0	12	32	23	32
			Phrasing		
<u>Category</u>]	2	3	4	5
Frequency	2	7	6	5	11
<u>Percent</u>		23	19_	16	35
Question #	7 - Voc	alization in my	opinion, is a	viable method	of instruction
Category		2	3	4	5
Frequency	1	0	8	10	12
Percent	3	0	26	32	39
Question #	8 - Voc	alization should	be used in c	horus classes	only.
~ .	•	_	_		′_

3



<u>Category</u> 1 Frequency 27

Percent 87

0

0

Question #9 - I clearly understand the most effective methods and procedures of vocalization.

<u>Category</u>	_1_	2	3	4	5
Frequency	1	3	9	12	6
<u>Percent</u>	3_	9	30	39	19

Question #10 - I feel traditional instruction (void of singing) is a more effective method of instruction than vocalization.

Category	<u> </u>	2	3	4	5	
Frequency	21	6	1	2	1	
Percent	68	19	3	6	3	

Question #11 - Implementation of vocalization practices in an instrumental setting is clearly understood.

<u>Category</u>	_1_	2	3	4	5
Frequency	2	8	13	4	4
<u>Percent</u>	6	26	42	13	13

Question #12 - Rate your perceived effectiveness of vocalization.

Category	_1		3	4	5
Frequency	1	3	8	11	8
Percent	3	9	26	35	26

Question #13 - I feel the most effective method of instruction is......

Method	S/P	S/P/S	P/S	P/S/P	Р	
Frequency	10	6	1	13	1	_
Percent	32	19	3	42	3	

key: $S/P = \frac{sing}{play}$

S/P/S = sing/play/sing

P/S = play/sing

P/S/P = play/sing/play

P = play only



xxvi

Question #14 - Musical examples are demonstrated to my students by.....

	PHRASES	 NOTES	
Frequency	26	7	
<u>Percent</u>	84	23	





U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDE	NTIFICATION:		
THE: The EFFE	cts of Vocalization	on Achievement Leve	Is of Selected
Performance 1	areas Found in Elemen	ntary Instrumenta	1 Bands.
Author(s): /ee	Stephen R.		
Corporate Source:		1	lication Date:
Salem-Teike	no University Maste	r's Thesis No	ivember, 1996
II. REPRODUCTIO	· ·		,
in the monthly abstract jour paper copy, and electronic given to the source of each	e as widely as possible timely and significant remai of the ERIC system, Resources in Educa optical media, and sold through the ERIC Do a document, and, if reproduction release is grad to reproduce and disseminate the identified. The sample sticker shown below will be affixed to all Level 1 documents.	tion (RIE), are usually made available to us ocument Reproduction Service (EDRS) or of inted, one of the following notices is affixed	ers in microfiche, reproduced her ERIC vendors. Credit is to the document. wing two options and sign at
Check here For Level 1 Release: Permitting reproduction in microfiche (4° x 6° film) or other ERIC archival media (e.g., electronic or optical) and paper copy.	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	Check here For Level 2 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.
	Level 1	Level 2	

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

·	"I hereby grant to the Educational Resources information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."			
Sign here→	Signature:	Printed Name/Position/Title:		
please	Organization/Address:	Stephen R Lee Telephone:	JFAX:	
		304-472-94.16	Data:	
		E-Mail Actives.	7/1/97	